### \* NOTICES \*

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# **CLAIMS**

### [Claim(s)]

[Claim 1] The main part section of absorptivity goods formed with an absorber arranged between a liquid permeability surface sheet, a non-liquid permeability rear-face sheet and a these liquid permeability surface sheet, and a non-liquid permeability rear-face sheet It has an outer layer sheet which laid on top of a non-liquid permeability rear-face sheet of this main part section of absorptivity goods, and was combined with it, and is the circumference section of a foot to the backside waist section and the both-sides section. Are disposable absorptivity goods equipped with the above, and the superposition section of a portion which extended at least to a method of outside [ section / of said absorber of a non-liquid permeability rear-face sheet and an outer layer sheet / crosswise / edges-on-both-sides ] is formed in the non-fixing section. The 1st elastic body and 2nd elastic body are arranged in said non-liquid permeability rear-face sheet at the circumference section of a foot of both sides, respectively from the backside waist section and the venter waist section of this non-liquid permeability rear-face sheet. Said 1st elastic body is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and arranges pars intermedia crosswise between this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff while it arranges along with the edges-on-both-sides section of the cross direction of a non-liquid permeability rear-face sheet, applying [ both ends ] it to the circumference section of a foot from the backside waist section. While said 2nd elastic body arranged along with the edges-on-both-sides section of the cross direction of a non-liquid permeability rear-face sheet, having applied [ both ends ] it to the circumference section of a foot from the venter waist section, it was crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and arranged pars intermedia crosswise between this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. It is characterized by things. [Claim 2] Disposable absorptivity goods according to claim 1 characterized by thing of the backside waist section of an outer layer sheet for which the side edge section and an other side edge of this backside waist section, and an other side edge of this venter waist section were combined on the other hand, respectively, and said absorptivity goods object was formed in trousers configurations of the side edge section and the venter waist section which have waist side opening and circumference side opening of a foot of a pair on the other hand. [Claim 3] While preparing a backside bond part in the both-sides section of the backside waist section of an outer layer sheet, respectively, a venter bond part combined with both this backside bond part respectively free [ engaging and releasing ] is prepared in the both-sides section of the venter waist section. At the time of use, one backside bond part and one venter bond part are combined. Again Disposable absorptivity goods according to claim 1 characterized by combining a backside bond part of another side, and a venter bond part of another side, respectively, and forming said absorptivity goods object in a trousers configuration which has waist side opening and circumference side opening of a foot of a pair.

[Claim 4] The 1st elastic body and 2nd elastic body cross in the circumference section of a foot of an absorptivity goods object. The 1st elastic body crosses and arranges the circumference section of length from the crotch to the cuff in a venter waist section side rather than a longitudinal direction abbreviation center section of the circumference section of said length from

the crotch to the cuff. The 2nd stic body is claim 1 characterized by sing and arranging the circumference section of this length from the crotch to the cuff in a backside waist section side rather than a longitudinal direction abbreviation center section of the circumference section of said length from the crotch to the cuff thru/or the disposable absorptivity goods of any one publication of three.

[Claim 5] Near the edges on both sides of an absorber, it has a gap between ulnar margin which counters a non-liquid-permeable sheet of two sheets mutually along with a longitudinal direction of this absorber. In the shape of symmetry, respectively Superposition, While making an inside edge side of both this \*\*\*\*\*\*\*\*\*\*\*, and a liquid permeability surface sheet into the non-fixing section, respectively, an outside edge of this non-liquid-permeable sheet is fixed on the surface of the absorptivity goods object main part section, respectively. Claim 1 characterized by arranging the 3rd elastic body along an inside edge of both this \*\*\*\*\*\*\*\*\*\*\*, respectively thru/or disposable absorptivity goods of any one publication of four.

[Claim 6] An outer layer sheet is claim 1 characterized by having consisted of inside sheet pieces which face said outside sheet piece [ which faces a wearing person's clothes side ], and non-liquid permeability rear-face sheet side, and become a skin side, and arranging an elastic body for backside waist, and an elastic body for venter waist between this outside sheet piece and an inside sheet piece thru/or the disposable absorptivity goods of any one publication of five.

[Claim 7] Claim 1 characterized by thing of an outer layer sheet for which the 4th elastic body is arranged along with the circumference section of a both-sides foot at least thru/or disposable absorptivity goods of any one publication of six.

[Claim 8] On the 1st [ of a long picture ] non-liquid permeability rear-face sheet object characterized by providing the following A production process which is made to counter in the shape of symmetry mutually, respectively, is crooked crosswise by turns, arranges the 1st long elastic string-like object and the 2nd elastic string-like object in a longitudinal direction of the 1st non-liquid permeability rear-face sheet object of said long picture, and is combined, A production process which piles up the 2nd long non-liquid permeability rear-face sheet object, joins together on both sides of said 1st elastic string-like object and said 2nd elastic string-like object, and forms a long non-liquid permeability rear-face sheet component on the 1st [ of said long picture ] non-liquid permeability rear-face sheet object, A production process which is located in a portion which said 1st elastic string-like object and said 2nd elastic string-like object approached, arranges a longitudinal direction of this absorber according to the cross direction of the 2nd nonliquid permeability rear-face sheet object of said long picture, and combines an absorber on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object, A production process which arranges a long liquid permeability surface sheet object, and is combined on both sides of said absorber on the 2nd [ of said long picture ] non-liquid permeability rear-face sheet object, A portion into which a gap of the 1st elastic string-like object between adjoining absorbers and the 2nd elastic string-like object isolated most a liquid permeability surface sheet object of a long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects and long absorbers which fastened said 1st elastic string-like object and the 2nd elastic string-like object Crosswise [ of a long non-liquid permeability rear-face sheet component and a long liquid permeability surface sheet object ] Along with a both-ends side of the 1st elastic string-like object and the 2nd elastic string-like object, it cuts from the both-sides section. An absorber is arranged between a liquid permeability surface sheet and a non-liquid permeability rear-face sheet. The backside waist section, The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the both-sides section in one one by one at a longitudinal direction, and said absorber is arranged in the circumference section of length from the crotch to the cuff at least. Said 1st elastic body While arranging along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the backside waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. Said 2nd elastic body A production process which forms the main part section of absorptivity goods which was crooked in the direction which crosses the circumference section of said length

rranging and joining together along wit from the crotch to the cuff wh e side edge section of the cross direction of a non-liquid permeability rear-face sheet, having applied both ends to the circumference section of a foot from the venter waist section, arranged in this non-liquid permeability rear-face sheet crosswise, and was combined with it in the circumference section of length from the crotch to the cuff A production process which arranges a long elastic member for backside waist, and an elastic member for venter waist in the crosswise both-sides section on a long outside sheet object toward a longitudinal direction of an outside sheet object of this long picture at two or more juxtaposition, respectively, and fixes A production process which forms an outer layer sheet component of a long picture which piled up a long inside sheet object, arranged and was combined on both sides of said elastic member for backside waist, and an elastic member for venter waist on an outside sheet object of said long picture On an outer layer sheet component of this long picture, turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, A production process which folds two of said outer layer sheet components, carries out them along with a longitudinal direction from a crosswise center section, combines between said adjoining main part sections of absorptivity goods crosswise, forms a bond part, and forms waist side opening between this bond part, A production process which cuts said bond part crosswise [ of said outer layer sheet component ], and has an outer layer sheet, and forms in a longitudinal direction the backside waist section, the circumference section of length from the crotch to the cuff which has the circumference section of a foot in the both-sides section, and the venter waist section in one one by one, and forms an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least

[Claim 9] The circumference section of length from the crotch to the cuff characterized by providing the following and the venter waist section are formed in a longitudinal direction in one one by one. After one production process of the production processes which form an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least A manufacture method of disposable absorptivity goods according to claim 8 characterized by having a production process which cuts the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet component or an outer layer sheet, and forms circumference side opening of a foot of a pair On a long outer layer sheet component, turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component A production process which folds two outer layer sheet components, carries out them along with a longitudinal direction from a crosswise center section, combines between said adjoining main part sections of absorptivity goods crosswise, forms a bond part, and forms waist side opening between this bond part Said bond part is cut crosswise [ of said outer layer sheet component ], and it has an outer layer sheet, and is the circumference section of a foot to the backside waist section and the both-sides section. [Claim 10] The circumference section of length from the crotch to the cuff which is equipped with the following and has the circumference section of a foot in the backside waist section and the both-sides section, And it is characterized by including a production process which forms the venter waist section in a longitudinal direction in one one by one, and forms an absorptivity goods

er in the circumference section of leng object which arranged said ab rom the crotch to the cuff at least. On the 1st [ of a long picture ] non-liquid permeability rear-face sheet object, the 1st long elastic string-like object and the 2nd elastic string-like object A production process which is made to counter in the shape of symmetry mutually, respectively, is crooked crosswise by turns, arranges in a longitudinal direction of the 1st non-liquid permeability rear-face sheet object of said long picture, and is combined with it, A production process which piles up the 2nd long non-liquid permeability rear-face sheet object, joins together on both sides of said 1st elastic string-like object and said 2nd elastic string-like object, and forms a long non-liquid permeability rear-face sheet component on the 1st [ of said long picture ] non-liquid permeability rear-face sheet object, A production process which is located in a portion which said 1st elastic string-like object and said 2nd elastic string-like object approached, arranges a longitudinal direction of this absorber according to the cross direction of the 2nd non-liquid permeability rear-face sheet object of said long picture, and combines an absorber on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object, A production process which arranges a long liquid permeability surface sheet object, and is combined on both sides of said absorber on the 2nd [ of said long picture ] non-liquid permeability rear-face sheet object, A portion into which a gap of the 1st elastic string-like object between adjoining absorbers and the 2nd elastic string-like object isolated most a liquid permeability surface sheet object of a long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects and long absorbers which fastened said 1st elastic string-like object and the 2nd elastic string-like object. Crosswise [ of a long nonliquid permeability rear-face sheet component and a long liquid permeability surface sheet object ] Along with a both-ends side of the 1st elastic string-like object and the 2nd elastic string-like object, it cuts from the both-sides section. An absorber is arranged between a liquid permeability surface sheet and a non-liquid permeability rear-face sheet. The backside waist section, The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the both-sides section in one one by one at a longitudinal direction, and said absorber is arranged in the circumference section of length from the crotch to the cuff at least. Said 1st elastic body While arranging along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the backside waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. Said 2nd elastic body A production process which forms the main part section of absorptivity goods which was crooked in the direction which crosses the circumference section of said length from the crotch to the cuff while arranging and joining together along with the side edge section of the cross direction of a nonliquid permeability rear-face sheet, having applied both ends to the circumference section of a foot from the venter waist section, arranged in this non-liquid permeability rear-face sheet crosswise, and was combined with it in the circumference section of length from the crotch to the cuff A production process which arranges a long elastic member for backside waist, and an elastic member for venter waist in the crosswise both-sides section on a long outside sheet object toward a longitudinal direction of an outside sheet object of this long picture at two or more juxtaposition, respectively, and fixes A production process which forms an outer layer sheet component of a long picture which piled up a long inside sheet object, arranged and was combined on both sides of said elastic member for backside waist, and an elastic member for venter waist on an outside sheet object of said long picture It prepares in an outer layer sheet component with the same gap. backside bond part material of a lot of this outer layer sheet component approached and arranged in parallel in crosswise 1 flank of a field on the other hand at a longitudinal direction of this outer layer sheet component — a crosswise size of said main part section of absorptivity goods, and abbreviation -- venter bond part material of a lot which can engage and release said backside bond part material which approached a flank besides the cross direction of an another side side of said outer layer sheet component at a longitudinal direction of this outer layer sheet component, and was prepared in juxtaposition freely — a crosswise size of said main part section of absorptivity goods, and abbreviation -- with a production process prepared in an outer layer sheet component with the same gap On an outer layer sheet component of this long picture, turn

a longitudinal direction of said h part section of absorptivity goods cr vise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-onboth-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, this outer layer sheet component - said - at least - between backside bond parts of a lot, and said line top which connects between venter bond parts of a lot at least — the cross direction — cutting — an outer layer sheet, a backside bond part, and a venter bond part [Claim 11] The circumference section of length from the crotch to the cuff characterized by providing the following and the venter waist section are formed in a longitudinal direction in one one by one. After one production process of the production processes which form an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least A manufacture method of disposable absorptivity goods according to claim 10 characterized by having a production process which cuts the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet component or an outer layer sheet, and forms the circumference section of a foot It prepares in an outer layer sheet component with the same gap, backside bond part material of a lot of an outer layer sheet component approached and arranged in parallel in crosswise 1 flank of a field on the other hand at a longitudinal direction of this outer layer sheet component — a crosswise size of said main part section of absorptivity goods, and abbreviation - venter bond part material of a lot which can engage and release said backside bond part material which approached a flank besides the cross direction of an another side side of said outer layer sheet component at a longitudinal direction of this outer layer sheet component, and was prepared in juxtaposition freely — a crosswise size of said main part section of absorptivity goods, and abbreviation — a production process prepared in an outer layer sheet component with the same gap On an outer layer sheet component of this long picture, turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section with an outer layer sheet component of a portion which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] of the circumference section of a foot of said main part section of absorptivity goods is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component said outer layer sheet component — said — - at least -- between backside bond parts of a lot, and said line top which connects between venter bond parts of a lot at least — the cross direction — cutting — an outer layer sheet, a backside bond part, and a venter bond part -- having -- and the backside waist section and the both-sides section — the circumference section of a foot

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### DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to disposable absorptivity goods and its manufacture methods, such as an object for adults, or a disposable diaper for incontinentia.

[0002]

[Description of the Prior Art] Conventionally the disposable absorptivity goods as this kind of a disposable diaper It has the absorber arranged between the liquid permeability surface sheet, the non-liquid permeability rear-face sheet, and a these liquid permeability surface sheet and a nonliquid permeability rear-face sheet. It has the diaper object with which the circumference section of length from the crotch to the cuff and the venter waist section with the circumference section of a foot are formed in the backside waist section and the crosswise edges-on-both-sides section in one one by one at a longitudinal direction. Generally the structure where the venter bond part combined with the both-sides section of the cross direction of the venter waist section of said diaper object free [ engaging and releasing to this backside bond part ] while a backside bond part is prepared in the both-sides section of the cross direction of said backside waist section of this diaper object was prepared is known. This disposable diaper it becomes a trousers configuration by combining a backside bond part and a venter bond part in the state of wearing. [0003] Moreover, conventionally, while this kind of disposable diaper prepares circumference side opening of a foot of the pair which carried out the opening to waist side [ one ] opening which combined the both-sides section of the backside waist section, and the both-sides section of the venter waist section, and carried out the opening toward the upper part toward the abbreviation lower part The disposable absorptivity goods beforehand formed in the trousers configuration are known so that an elastic body may be arranged crosswise in the backside waist section and the venter waist section and it may expand and contract over the abbreviation perimeter of waist side opening.

[0004] And although the disposable absorptivity goods which present the two above-mentioned kinds of configurations are called a common-name outer, in order to prevent \*\*\*\* to the exterior of elimination liquid, the configuration in which solid gathers are prepared from near the circumference section of a foot, respectively is common to the skin side of these disposable absorptivity goods.

[0005] in order to reduce the amount of the disposable absorptivity goods used and to decrease reduction of costs, and the yield of trash in recent years, without it, on the other hand, equips a direct covering arrival person's body with disposable absorptivity goods independently — between disposable absorptivity goods and a covering arrival person's bodies — inner — business — the example of use equipped with a pad has increased. inner [ this ] — business — size of a pad is smaller than disposable absorptivity goods, and there are many configurations where concave \*\*\*\*\* was prepared in the longitudinal direction abbreviation center section called an abbreviation rectangle configuration, a gourd mold, or sandglass mold. inner [ moreover, / this ] — business — in order that a pad may prevent \*\*\*\* of elimination liquid even if it is a case with much urine volume of a covering arrival person so that it may be convenient or also in case the covering arrival person of disposable absorptivity goods uses it, doing long duration continuation like [ at the time of sleep of Nighttime ], a comparatively large—sized thing is used in many cases.

# [0006]

[Problem(s) to be Solved by the Invention] However, in order that the solid gathers of disposable absorptivity goods may incorporate and form an elastic body, arrangement of an elastic body is easy, and gathers are usually formed in the shape of a straight line by arranging an elastic body in the both-sides section of disposable absorptivity goods in the shape of a straight line along with a longitudinal direction, respectively so that manufacture may become easy. for this reason, disposable absorptivity goods — inner — business — the case where a pad is used — inner — business — the crosswise size of a pad — the gap between said solid gathers — abbreviation — if it is an equal size — inner [ this ] — business, although a pad can be arranged between solid gathers from between the solid gathers of both sides, without beginning to see inner [ to be used ] — business — the crosswise size of a pad with a larger size than the gap between said solid gathers inner [ this ] — business — the portion which began to see a pad crosswise — being generated — inner — business, as a result of a pad's crushing solid gathers The solid gathers of the crushed portion have a possibility that elimination liquid may \*\*\*\*, from the portion which isolated from a covering arrival person's body and these solid gathers and a covering arrival person's body isolated.

[0007] Then, by enlarging the crosswise size of the circumference section of length from the crotch to the cuff of disposable absorptivity goods the crosswise size between the solid gathers of the both sides which extend in a longitudinal direction from the circumference section of a biped – large — carrying out — inner [ large ] — business, although how to prevent solid gathers' sticking to a covering arrival person's body as solid gathers are not crushed, and \*\*\*\* of elimination liquid arising can be considered even if it uses a pad Even if a pad can prevent crushing solid gathers, the crosswise size of the circumference section of length from the crotch to the cuff of disposable absorptivity goods becomes large, according to this method — inner — business — a covering arrival person Since the adhesion and fit nature of disposable absorptivity goods and a covering arrival person's body worsen, sense of incongruity is sensed in the state of wearing, and it is easy to produce a crevice between the gathers of disposable absorptivity goods, and a covering arrival person's body, and there is a problem that \*\*\*\* of elimination liquid will occur mostly.

[0008] Since a covering arrival person's adhesion and fit nature with the body are good, \*\*\*\* of the elimination liquid to the exterior does not arise. that by which this invention was made in view of the above-mentioned trouble — it is — inner [ large-sized ] — business, even if it uses a pad inner [ moreover, / which was made to intervene between a covering arrival person's bodies ] — business — the wearing condition of a pad is held good and it aims at offering the disposable absorptivity goods which can be manufactured easily, and its manufacture method. [0009]

[Means for Solving the Problem] Disposable absorptivity goods of invention according to claim 1 The main part section of absorptivity goods formed with an absorber arranged between a liquid permeability surface sheet, a non-liquid permeability rear-face sheet and a these liquid permeability surface sheet, and a non-liquid permeability rear-face sheet, It has an outer layer sheet which laid on top of a non-liquid permeability rear-face sheet of this main part section of absorptivity goods, and was combined with it. And the backside waist section, the circumference section of length from the crotch to the cuff which has the circumference section of a foot in the both-sides section, and the venter waist section form in a longitudinal direction in one one by one. And it has an absorptivity goods object which arranged said absorber in the circumference section of said length from the crotch to the cuff at least. An elastic body for backside waist and an elastic body for venter waist which are expanded and contracted crosswise [ of said outer layer sheet ] are arranged in the backside waist section and the venter waist section of an outer layer sheet of this absorptivity goods object. A non-liquid permeability rear-face sheet extends in a method of outside [ section / of said absorber / longitudinal direction both ends and the crosswise edges-on-both-sides section ], and is set in the circumference section of a foot of said absorptivity goods object. [ at least ] The superposition section of a portion which extended at least to a method of outside [ section / of said absorber of a non-liquid permeability rear-face sheet and an outer layer sheet / crosswise / edges-on-both-sides ] is formed in the non-fixing section. On said non-liquid permeability rear-face sheet The 1st elastic body and 2nd elastic body

section of a foot of both sides, respecly from the backside are arranged in the circumfered waist section and the venter waist section of this non-liquid permeability rear-face sheet. Said 1st elastic body While arranging along with the edges-on-both-sides section of the cross direction of a non-liquid permeability rear-face sheet, applying a both-ends side to the circumference section of a foot from the backside waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise between this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. Said 2nd elastic body While arranging along with the edges-onboth-sides section of the cross direction of a non-liquid permeability rear-face sheet, applying a both-ends side to the circumference section of a foot from the venter waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise between this non-liquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. [0010] And since [ of an absorptivity goods object ] a non-liquid permeability rear-face sheet has extended in a method of outside [ section / of an absorber / longitudinal direction both ends and the crosswise edges-on-both-sides section ], it can prevent that elimination liquid which is not absorbed by absorber \*\*\*\* to an outer layer sheet side. [ at least ] Moreover, since the circumference section of a foot was formed in the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet, disposable absorptivity goods can be stuck in a covering arrival person's body, and it can equip with them. [0011] An absorptivity goods object at least moreover, a non-liquid permeability rear-face sheet It extends in a method of outside [ section / of an absorber / longitudinal direction both ends and the crosswise edges-on-both-sides section ]. The 1st and 2nd elastic bodies if a both-ends side is applied to the circumference section of a foot from the backside waist section and the venter waist section, while arranging along with the edges-on-both-sides section of the cross direction of a non-liquid permeability rear-face sheet, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in the circumference section of length from the crotch to the cuff between this nonliquid permeability rear-face sheet and an outer layer sheet. In the circumference section of a foot of an absorptivity goods object, the superposition section of a portion which extended to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet and an outer layer sheet / crosswise / edges-on-both-sides ] by being formed in the non-fixing section A nonliquid permeability rear-face sheet can enlarge a crosswise size, without being influenced by crosswise size of an outer layer sheet. Moreover, since the circumference section of a foot of this non-liquid permeability rear-face sheet stands up in a covering arrival person's direction of the body, forms solid gathers and sticks them to a covering arrival person's body, without being influenced by stress of the circumference section of a foot of an outer layer sheet in case a covering arrival person's body is equipped with disposable absorptivity goods inner [ large-sized ] --- business --- a covering arrival person's body can be equipped in the high condition of adhesion or fit nature, without solid gathers' sticking to a covering arrival person's body, \*\*\*\* of elimination liquid to the exterior not happening, even if it uses a pad, and standing up of a non-liquid permeability outer layer sheet influencing an outer layer sheet. [0012] In disposable absorptivity goods according to claim 1, on the other hand, the side edge section and an other side edge of this backside waist section, and an other side edge of this venter waist section are combined, respectively, and disposable absorptivity goods of invention according to claim 2 form an absorptivity goods object in trousers configurations of a one side edge of the backside waist section of an outer layer sheet, and the venter waist section which have waist side opening and circumference side opening of a foot of a pair. [0013] and a thing which an absorptivity goods object is doing for a trousers configuration these disposable absorptivity goods -- inner -- business -- where a pad is used, it can detach and attach by the ability detaching and attaching like trousers simply. [0014] Disposable absorptivity goods of invention according to claim 3 In disposable absorptivity goods according to claim 1, while preparing a backside bond part in the both-sides section of the backside waist section of an outer layer sheet, respectively, a venter bond part combined with

both this backside bond part respectively free [ engaging and releasing ] is prepared in the both-

sides section of the venter was section. At the time of use, one backsit sond part and one venter bond part are combined, and a backside bond part of another side and a venter bond part of another side are combined, respectively, and said absorptivity goods object is formed in a trousers configuration which has waist side opening and circumference side opening of a foot of a pair.

[0015] and by enabling engaging and releasing of the backside waist section of an absorptivity goods object, a backside bond part arranged in edges on both sides of the venter waist section, respectively, and a venter bond part, a covering arrival person's body is equipped with this absorptivity goods object, and it secedes from it again — it can make — moreover, between a covering arrival person's body, and absorptivity goods objects — inner — business — since it can equip with a pad or can be made to secede from it — inner — business — a pad is easily exchangeable.

[0016] Disposable absorptivity goods of invention according to claim 4 In claim 1 thru/or disposable absorptivity goods of any one publication of three The 1st elastic body and 2nd elastic body cross in the circumference section of a foot of an absorptivity goods object. The 1st elastic body crosses and arranges the circumference section of length from the crotch to the cuff in a venter waist section side rather than a longitudinal direction abbreviation center section of the circumference section of said foot, and the 2nd elastic body crosses and arranges the circumference section of this length from the crotch to the cuff in a backside waist section side rather than a longitudinal direction abbreviation center section of the circumference section of said foot.

[0017] And the 1st elastic body and 2nd elastic body will be continuously arranged along with the crosswise edges—on—both—sides section of a non—liquid permeability rear—face sheet, and, as for a non—liquid permeability rear—face sheet near the circumference section of a foot of an absorptivity goods object, solid gathers are formed toward the standing—up direction.

[0020] In claim 1 thru/or disposable absorptivity goods of any one publication of five, disposable absorptivity goods of invention according to claim 6 consist of inside sheet pieces which an outer layer sheet faces said outside sheet piece [ which faces a wearing person's clothes side ], and non-liquid permeability rear—face sheet side, and become a skin side, and arrange an elastic body for backside waist, and an elastic body for venter waist between this outside sheet piece and an inside sheet piece.

[0021] And with an elastic body for backside waist and an elastic body for venter waist which were arranged between this outside sheet piece and an inside sheet piece, by acquiring crosswise elasticity in the waist partial abbreviation whole region of an outer layer sheet, adhesion and fit nature of an absorptivity goods object and a covering arrival person's body improve, and a \*\*\*\* prevention function of elimination liquid of an absorptivity goods object improves.

[0022] Disposable absorptivity goods of invention according to claim 7 are things of an outer layer sheet which arrange the 4th elastic body along with the circumference section of a both-sides foot at least in claim 1 thru/or disposable absorptivity goods of any one publication of six.

[0023] And when a covering artical person's body is equipped with an absorptivity goods object, the 4th elastic body of an outer layer sheet arranged along with the circumference section of a both-sides foot at least contracts. An outer layer sheet 4th near [ this ] the elastic body is concluded in the both-sides section of the circumference section of a foot at the circumference of a covering arrival person's foot, forms the 3rd solid gathers, and does the elimination \*\*\*\*\*\* prevention effect so. When it equips with an absorptivity goods object as an outer, while the elimination \*\*\*\*\*\* prevention effect of this absorptivity goods object improves, the adhesion of this absorptivity goods object and a covering arrival person's body improves.

[0024] A manufacture method of disposable absorptivity goods invention according to claim 8 On the 1st [ of a long picture ] non-liquid permeability rear-face sheet object, the 1st long elastic string-like object and the 2nd elastic string-like object A production process which is made to counter in the shape of symmetry mutually, respectively, is crooked crosswise by turns, arranges in a longitudinal direction of the 1st non-liquid permeability rear-face sheet object of said long picture, and is combined with it, A production process which piles up the 2nd long non-liquid permeability rear-face sheet object, joins together on both sides of said 1st elastic string-like object and said 2nd elastic string-like object, and forms a long non-liquid permeability rear-face sheet component on the 1st [ of said long picture ] non-liquid permeability rear-face sheet object, A production process which is located in a portion which said 1st elastic string-like object and said 2nd elastic string-like object approached, arranges a longitudinal direction of this absorber according to the cross direction of the 2nd non-liquid permeability rear-face sheet object of said long picture, and combines an absorber on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object, It has a production process which arranges a long liquid permeability surface sheet object, and is combined on both sides of said absorber on the 2nd [ of said long picture ] non-liquid permeability rear-face sheet object.

[0025] Moreover, a liquid permeability surface sheet object of a long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects and long absorbers which fastened said 1st elastic string-like object and the 2nd elastic string-like object In a portion which a gap of the 1st elastic string-like object between adjoining absorbers and the 2nd elastic stringlike object isolated most Crosswise [ of a long non-liquid permeability rear-face sheet component and a long liquid permeability surface sheet object ] Along with a both-ends side of the 1st elastic string-like object and the 2nd elastic string-like object, it cuts from the both-sides section. An absorber is arranged between a liquid permeability surface sheet and a non-liquid permeability rear-face sheet. The backside waist section, The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the both-sides section in one one by one at a longitudinal direction, and said absorber is arranged in the circumference section of length from the crotch to the cuff at least. Said 1st elastic body While arranging along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the backside waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in this nonliquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. Said 2nd elastic body While arranging and joining together along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the venter waist section It is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and has a production process which forms the main part section of absorptivity goods which arranged in this non-liquid permeability rear-face sheet crosswise, and was combined with it in the circumference section of length from the crotch to the cuff.

[0026] Furthermore, a production process which arranges a long elastic member for backside waist, and an elastic member for venter waist in the crosswise both-sides section on a long outside sheet object toward a longitudinal direction of an outside sheet object of this long picture at two or more juxtaposition, respectively, and fixes, A production process which forms an outer layer sheet component of a long picture which piled up a long inside sheet object, arranged and was combined on both sides of said elastic member for backside waist, and an elastic member for venter waist on an outside sheet object of said long picture, On an outer layer sheet component of

this long picture, turn a longitudmal direction of said main part section of sorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, A production process which folds two of said outer layer sheet components, carries out them along with a longitudinal direction from a crosswise center section, combines between said adjoining main part sections of absorptivity goods crosswise, forms a bond part, and forms waist side opening between this bond part, Cut said bond part crosswise [ of said outer layer sheet component ], and it has an outer layer sheet. And a production process which forms in the backside waist section and the both-sides section the circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section in one one by one at a longitudinal direction, and forms an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least is included.

[0027] And a long non-liquid permeability rear-face sheet component, the 1st elastic string-like object, the 2nd elastic string-like object, And moving a long liquid permeability surface sheet object to a longitudinal direction, it piles up in order and the main part section of absorptivity goods can be manufactured. The main part section of absorptivity goods which cuts crosswise a liquid permeability surface sheet object of a long picture which fastened a long non-liquid permeability rear-face sheet component and a long absorber, and is formed Since it can arrange on an outer layer sheet component moved to a longitudinal direction, without changing sense of a longitudinal direction and the cross direction, increase in efficiency of a manufacturing process of disposable absorptivity goods and easy-ization of manufacture can be attained.

[0028] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like object and the 2nd elastic string-like object to a travelling direction of a long non-liquid permeability rear-face sheet component Since the 1st elastic string-like object and the 2nd elastic string-like object are made to counter in the shape of symmetry mutually, respectively, and it is crooked by turns in a longitudinal direction, and can arrange in a longitudinal direction of the 1st long non-liquid permeability rear-face sheet object and can combine with it it is not necessary to arrange the 1st elastic body and 2nd elastic body in a long non-liquid permeability rear-face sheet component from a right angle to a flow direction which goes to a longitudinal direction of a long non-liquid permeability rear-face sheet component, and disposable absorptivity goods can be manufactured easily.

[0029] Moreover, after folding two outer layer sheet components, carrying out them along with a longitudinal direction from a crosswise center section and combining between the main part sections of absorptivity goods crosswise, disposable absorptivity goods formed in a trousers configuration can be easily manufactured by cutting crosswise [ of an outer layer sheet component ].

[0030] A manufacture method of disposable absorptivity goods according to claim 9 In a manufacture method of disposable absorptivity goods according to claim 8 on a long outer layer sheet component Turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, A production process which folds two outer layer sheet components, carries out them along with a longitudinal direction from a crosswise center section, combines between said adjoining main part sections of absorptivity goods

crosswise, forms a bond part, alteriorms waist side opening between this and part, Cut said bond part crosswise [ of said outer layer sheet component ], and it has an outer layer sheet. The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the backside waist section and the both-sides section in one one by one at a longitudinal direction. It has a production process which cuts the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet component or an outer layer sheet, and forms circumference side opening of a foot of a pair after one production process of the production processes which form an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least.

[0031] And disposable absorptivity goods formed in a trousers configuration can be manufactured easily.

[0032] A manufacture method of disposable absorptivity goods invention according to claim 10 On the 1st [ of a long picture ] non-liquid permeability rear-face sheet object, the 1st long elastic string-like object and the 2nd elastic string-like object A production process which is made to counter in the shape of symmetry mutually, respectively, is crooked crosswise by turns, arranges in a longitudinal direction of the 1st non-liquid permeability rear-face sheet object of said long picture, and is combined with it, A production process which piles up the 2nd long non-liquid permeability rear-face sheet object, joins together on both sides of said 1st elastic string-like object and said 2nd elastic string-like object, and forms a long non-liquid permeability rear-face sheet component on the 1st [ of said long picture ] non-liquid permeability rear-face sheet object, A production process which is located in a portion which said 1st elastic string-like object and said 2nd elastic string-like object approached, arranges a longitudinal direction of this absorber according to the cross direction of the 2nd non-liquid permeability rear-face sheet object of said long picture, and combines an absorber on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object, It has a production process which arranges a long liquid permeability surface sheet object, and is combined on both sides of said absorber on the 2nd [ of said long picture ] non-liquid permeability rear-face sheet object.

[0033] Moreover, a liquid permeability surface sheet object of a long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects and long absorbers which fastened said 1st elastic string-like object and the 2nd elastic string-like object In a portion which a gap of the 1st elastic string-like object between adjoining absorbers and the 2nd elastic stringlike object isolated most Crosswise [ of a long non-liquid permeability rear-face sheet component and a long liquid permeability surface sheet object ] Along with a both-ends side of the 1st elastic string-like object and the 2nd elastic string-like object, it cuts from the both-sides section. An absorber is arranged between a liquid permeability surface sheet and a non-liquid permeability rear-face sheet. The backside waist section, The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the both-sides section in one one by one at a longitudinal direction, and said absorber is arranged in the circumference section of length from the crotch to the cuff at least. Said 1st elastic body While arranging along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the backside waist section, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in this nonliquid permeability rear-face sheet in the circumference section of length from the crotch to the cuff. Said 2nd elastic body While arranging and joining together along with the side edge section of the cross direction of a non-liquid permeability rear-face sheet, applying both ends to the circumference section of a foot from the venter waist section It is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and has a production process which forms the main part section of absorptivity goods which arranged in this non-liquid permeability rear-face sheet crosswise, and was combined with it in the circumference section of length from the crotch to the cuff.

[0034] Furthermore, a production process which arranges a long elastic member for backside waist, and an elastic member for venter waist in the crosswise both—sides section on a long outside sheet object toward a longitudinal direction of an outside sheet object of this long picture

hich forms an outer actively, and fixes, A production proces at two or more juxtaposition, re layer sheet component of a long picture which piled up a long inside sheet object, arranged and was combined on both sides of said elastic member for backside waist, and an elastic member for venter waist on an outside sheet object of said long picture, Prepare the same gap and it prepares in an outer layer sheet component, backside bond part material of a lot of this outer layer sheet component approached and arranged in parallel in crosswise 1 flank of a field on the other hand at a longitudinal direction of this outer layer sheet component — a crosswise size of said main part section of absorptivity goods, and abbreviation - venter bond part material of a lot which can engage and release said backside bond part material which approached a flank besides the cross direction of an another side side of said outer layer sheet component at a longitudinal direction of this outer layer sheet component, and was prepared in juxtaposition freely — a crosswise size of said main part section of absorptivity goods, and abbreviation -- with a production process prepared in an outer layer sheet component with the same gap On an outer layer sheet component of this long picture, turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, It cuts crosswise at least between backside bond parts of a lot, and on said line which connects between venter bond parts of a lot at least, this outer layer sheet component — said — A production process which has an outer layer sheet, a backside bond part, and a venter bond part, and forms in a longitudinal direction the backside waist section, the circumference section of length from the crotch to the cuff which has the circumference section of a foot in the both-sides section, and the venter waist section in one one by one, and forms an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least is provided. [0035] And a long non-liquid permeability rear-face sheet component, the 1st elastic string-like object, the 2nd elastic string-like object, And moving a long liquid permeability surface sheet object to a longitudinal direction, it piles up in order and the main part section of absorptivity goods can be manufactured. The main part section of absorptivity goods which cuts crosswise a liquid permeability surface sheet object of a long picture which fastened a long non-liquid permeability rear-face sheet component and a long absorber, and is formed Since it can arrange on an outer layer sheet component moved to a longitudinal direction, without changing sense of a longitudinal direction and the cross direction, increase in efficiency of a manufacturing process of disposable absorptivity goods and easy-ization of manufacture can be attained. [0036] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like object and the 2nd elastic string-like object to a travelling direction of a long non-liquid permeability rear-face sheet component Since the 1st elastic string-like object and the 2nd elastic string-like object are made to counter in the shape of symmetry mutually, respectively, and it is crooked by turns in a longitudinal direction, and can arrange in a longitudinal direction of the 1st long non-liquid permeability rear-face sheet object and can combine with it It is not necessary to arrange the 1st elastic body and 2nd elastic body in a long non-liquid permeability rear-face sheet component from a right angle to a flow direction which goes to a longitudinal direction of a long non-liquid permeability rear-face sheet component, and disposable absorptivity goods can be manufactured easily.

[0037] Furthermore, disposable absorptivity goods which have a venter bond part which has a backside bond part in the both-sides section of the backside waist section of an outer layer sheet, and is combined with it by the both-sides section of the venter waist section respectively free [engaging and releasing] at both this backside bond part can be manufactured easily.
[0038] A manufacture method of disposable absorptivity goods according to claim 11 In a manufacture method of disposable absorptivity goods according to claim 10 on the other hand, an outer layer sheet component to crosswise 1 flank of a field It prepares in an outer layer sheet

kside bond part material of a lot which component with the same gap. longitudinal direction of this outer layer sheet component, and is arranged in parallel -- a crosswise size of said main part section of absorptivity goods, and abbreviation -- venter bond part material of a lot which can engage and release said backside bond part material which approached a flank besides the cross direction of an another side side of said outer layer sheet component at a longitudinal direction of this outer layer sheet component, and was prepared in iuxtaposition freely -- a crosswise size of said main part section of absorptivity goods, and abbreviation — with a production process prepared in an outer layer sheet component with the same gap On an outer layer sheet component of this long picture, turn a longitudinal direction of said main part section of absorptivity goods crosswise [ of an outer layer sheet component ], and this main part section of absorptivity goods is arranged. The superposition section of a portion and an outer layer sheet component of the circumference section of a foot of said main part section of absorptivity goods which extended at least to a method of outside [ section / of an absorber of a non-liquid permeability rear-face sheet / crosswise / edges-on-both-sides ] is removed. A production process which combines a non-liquid permeability rear-face sheet of a portion with which said absorber was arranged in the circumference section of length from the crotch to the cuff of said main part section of absorptivity goods on an outer layer sheet component, It cuts crosswise at least between backside bond parts of a lot, and on said line which connects between venter bond parts of a lot at least, said outer layer sheet component — said — It has an outer layer sheet, a backside bond part, and a venter bond part. And the backside waist section, The circumference section of length from the crotch to the cuff which has the circumference section of a foot, and the venter waist section are formed in the both-sides section in one one by one at a longitudinal direction. It has a production process which cuts the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet component or an outer layer sheet, and forms the circumference section of a foot after one production process of the production processes which form an absorptivity goods object which arranged said absorber in the circumference section of length from the crotch to the cuff at least.

[0039] And disposable absorptivity goods of an expansion condition can be manufactured easily. [0040]

[Embodiment of the Invention] Hereafter, the configuration of the gestalt of the 1 operation in the disposable absorptivity goods of this invention is explained with reference to a drawing. [0041] As shown in <u>drawing 1</u> and <u>drawing 2</u>, disposable absorptivity goods are for example, disposable diapers, and are equipped with the diaper object 1 as an absorptivity goods object. The lumbar part, such as a sick person and an incontinentia person, is equipped with this diaper object 1 along with the body at a longitudinal direction toward a covering arrival person's regions—of—back side to an abdomen side from the expansion condition shown in <u>drawing 1</u> of a long abbreviation rectangle configuration.

[0042] And this diaper object 1 has main part section of absorptivity goods 4a which consists of a liquid permeability surface sheet 2, a non-liquid permeability rear-face sheet 3, and an absorber 4, and the outer layer sheet 5.

[0043] Since said liquid permeability surface sheet 2 is a portion which has liquid permeability, such as textile fabrics, a nonwoven fabric, a porous film, and a synthetic fiber, and permeability, and contacts the body directly so that elimination liquid, such as urine, can be absorbed to said absorber 4 for example, it is formed in the web material of the feel near an underwear so that displeasure may not be given.

[0044] Moreover, said non-liquid permeability rear—face sheet 3 prevents that other clothing, such as underwear, or a sheet becomes dirty with elimination liquid, such as urine, and 1st non-liquid permeability rear—face sheet piece 6a which has liquid impermeability, such as synthetic resin, such as polyethylene resin, and permeability, and 2nd non-liquid permeability rear—face sheet piece 6b are formed of superposition adhesion.

[0045] Moreover, it is formed in the \*\*\*\*\*\*\* rectangle configuration which it was formed in the shape of a sheet with the material which is a material which is mainly concerned with pulp in order that said absorber 4 may fully absorb elimination liquid, such as urine, and contained material, such as a high-polymer absorbent, in the part, the longitudinal direction and cross direction size was smaller than the said liquid permeability surface sheet 2, and the abbreviation pars intermedia for

a longitudinal direction cut to the shape of \*\*\*\*\* towards the inner direction in the edges on both sides of this absorber 4, and was lacked.

[0046] And this absorber 4 is arranged in the abbreviation center section of the non-liquid permeability rear-face sheet 3 between the liquid permeability surface sheet 2 and the non-liquid permeability rear-face sheet 3. This liquid permeability surface sheet 2 and the non-liquid permeability rear-face sheet 3 extend in the method of outside [ section / of said absorber 4 / the longitudinal direction both ends and the crosswise edges-on-both-sides section ]. The periphery section in which this liquid permeability surface sheet 2 extends is combined with this non-liquid permeability rear-face sheet 3 with adhesives etc. With said liquid permeability surface sheet 2 and said non-liquid permeability rear-face sheet 3, sealing of the absorber 4 is carried out and absorptivity goods object 4a is formed with this liquid permeability surface sheet 2, the non-liquid permeability rear-face sheet 3, and an absorber 4.

[0047] And as for main part section of absorptivity goods 4a, the backside waist section 8, the circumference section 9 of length from the crotch to the cuff, and the venter waist section 10 are formed in a longitudinal direction one by one at one. Both sides in the shape of \*\*\*\*, respectively from the backside waist section 8 and the venter waist section 10 of this main part section of absorptivity goods 4a Notching, Circumference section of foot 11a is formed in the both-sides section of the circumference section 9 of length from the crotch to the cuff at least. Between 1st non-liquid permeability rear-face sheet piece 6a and 2nd non-liquid permeability rear-face sheet piece 6b It was arranged where the 1st below-mentioned elastic body 12 and 2nd below-mentioned elastic body 13 which were formed of thin string rubber etc. are elongated, and it has fixed.

[0048] Moreover, every time a both-ends side covers said 1st elastic body 12 over circumference section of foot 11a from the backside waist section 8, it is arranged along with the edges-on-both-sides section of the cross direction of the non-liquid permeability rear-face sheet 3, is crooked in the direction in which pars intermedia crosses the circumference section 9 of said length from the crotch to the cuff in the longitudinal direction abbreviation center section of circumference section of foot 11a, and is arranged crosswise in the circumference section 9 of length from the crotch to the cuff.

[0049] Moreover, every time a both-ends side covers said 2nd elastic body 13 over circumference section of foot 11a from the venter waist section 10, it is arranged along with the edges-on-both-sides section of the cross direction of the non-liquid permeability rear-face sheet 3, is crooked in the direction in which pars intermedia crosses the circumference section 9 of said length from the crotch to the cuff in the longitudinal direction abbreviation center section of circumference section of foot 11a, and is arranged crosswise in the circumference section 9 of length from the crotch to the cuff.

[0050] And said the 1st elastic body 12 and said 2nd elastic body 13 cross in the abbreviation center section of the longitudinal direction of circumference section of foot 11a of said non-liquid permeability rear—face sheet 3. The pars intermedia of this 1st elastic body 12 is arranged in the venter waist section 10 side [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ] rather than the longitudinal direction center section of the non-liquid permeability rear—face sheet 3. Moreover, the pars intermedia of said 2nd elastic body 13 is arranged in the backside waist section 8 side [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ] rather than the longitudinal direction center section of the non-liquid permeability rear—face sheet 3.

[0051] Moreover, the outer layer sheet 5 piles up the inside sheet piece 15 which has permeability and liquid impermeability, and it joins together in one and it is formed in the outside sheet piece 14 which has liquid impermeability.

[0052] And this outer layer sheet 5 is formed in a rectangle configuration symmetrical with \*\*\*\* with the center line in alignment with a longitudinal direction while the backside waist section 8, the circumference section 9 of length from the crotch to the cuff, and the venter waist section 10 are formed in the longitudinal direction of the diaper object 1 in one one by one in the state of expansion, and the circumference section 11 of a foot which cut the edges on both sides of the cross direction of the circumference section 9 of this length from the crotch to the cuff in the shape of a concave circle, and was lacked is formed.

[0053] And the cross direction as formed in the long abbreviation rectains configuration, and after the elastic body 16 for backside waist formed from the elastic member of two or more shape of a long and slender string between said outside sheet piece 14 and said inside sheet piece 15 has developed in this backside waist section 8, the backside waist section 8 of this outer layer sheet 5 was arranged crosswise, and has fixed.

[0054] Moreover, like the backside waist section 8, the venter waist section 10 of this outer layer sheet 5 was formed crosswise in the long abbreviation rectangle configuration, in this venter waist section 10, after the elastic body 17 for venter waist formed from the elastic member of two or more shape of a long and slender string has developed, was arranged crosswise between said outside sheet piece 14 and the inside sheet piece 15, and has fixed.

[0055] And along with the circumference section 11 of a foot of the both sides of the outer layer sheet 5, between the outside sheet piece 14 and the inside sheet piece 15, after the 4th elastic body 18 and 18 has developed, it has arranged and fixed.

[0056] furthermore, in the both-sides section of the inside sheet piece 15 in the backside waist section 8 of the outer layer sheet 5 While the backside bond parts 19, 19, 19, and 19 formed with the field fastener of the lot which approaches a longitudinal direction and is arranged in parallel are formed in the venter waist section 10, the venter bond parts 20 and 20 of the lot formed with the field fastener which can engage and release both these backside bond parts 19, 19, and 19 freely are formed in the both-sides section of the outside sheet piece 14.

[0057] Moreover, fixing association of the portion in which main part section of absorptivity goods 4a which has said liquid permeability surface sheet 2, the non-liquid permeability rear—face sheet 3, and an absorber 4 was piled up and arranged in the abbreviation center section of this outer layer sheet 5, and said absorber 4 of said non-liquid permeability rear—face sheet 3 was arranged is carried out by adhesives 3a etc. And the superposition section of this non-liquid permeability rear—face sheet 3 and said outer layer sheet 5 Set even from the portion which extends in the method of outside [ section / of an absorber 4 / crosswise / edges—on—both—sides ], and the portion which extends in the method of outside [ both ends / of an absorber 4 / longitudinal direction ] to the longitudinal direction both ends of the non-liquid permeability rear—face sheet 3, and it is formed in the non—fixing section. Moreover, fixing association of the longitudinal direction both ends of said non-liquid permeability rear—face sheet 3 is carried out in adhesives 3a etc. at said outer layer sheet 5.

[0058] In addition, the longitudinal direction size and the crosswise size of said outer layer sheet 5 are larger than the longitudinal direction size and the crosswise size of said non-liquid permeability rear-face sheet 3.

[0059] Moreover, near the edges on both sides of said absorber 4, it has piled up in the shape of symmetry with the gap, respectively between the ulnar margin which the non-liquid-permeable sheets 21 and 21 of two sheets counter mutually along with the longitudinal direction of this absorber 4. And this inside edge side of the non-liquid-permeable sheets 21 and 21 of two sheets and the liquid permeability surface sheet 2 of main part section of absorptivity goods 4a were formed in the free end made into the non-fixing section, respectively, and have fixed the outside edge of these non-liquid-permeable sheets 21 and 21 of two sheets with adhesives etc., respectively in the both-sides extension section of the cross direction of said liquid permeability surface sheet 2. And after the 3rd elastic body 22 and 22 had developed along the inside edge of the free end, respectively, it was arranged by these non-liquid-permeable sheets 21 and 21 of two sheets, and to them, it has fixed with adhesives.

[0060] And these non-liquid-permeable sheets 21 and 21 are formed in the web material with liquid impermeability, such as synthetic resin, such as polyethylene resin, and permeability in order to prevent that other clothing, such as underwear, or a sheet becomes dirty with elimination liquid, such as urine, like the non-liquid permeability rear—face sheet 3. Moreover, since these non-liquid-permeable sheets 21 and 21 are portions which contact the body directly like the liquid permeability surface sheet 2, they are formed in the web material of the feel near an underwear. [0061] And main part section of absorptivity goods 4a which consists of said liquid permeability surface sheet 2, said non-liquid permeability rear—face sheet 3, and an absorber 4 is arranged in the surface of said outer layer sheet 5. The diaper object 1 which laid the non-liquid-permeable sheets 21 and 21 on top of the external surface of said liquid permeability surface sheet 2 in the

shape of symmetry, respective, and formed them in it The backside was section 8, the circumference section 9 of length from the crotch to the cuff, and the venter waist section 10 are formed in a longitudinal direction in one one by one, and have the circumference section 11 of a foot in the both-sides section of the circumference section 9 of length from the crotch to the cuff as shown in drawing 1.

[0062] It is formed in the end side of the longitudinal direction of the diaper object 1 in an expansion condition, the diaper object 1 is suitably bent from this expansion condition, and the backside waist section 8 of this diaper object 1 serves as a portion located in the regions—of—back side of a covering arrival person's waist.

[0063] And the pars intermedia of the longitudinal direction in an expansion condition is followed at the longitudinal direction side of the diaper object 1 of the backside waist section 8, it is formed in one, the diaper object 1 is suitably bent from this expansion condition, and the circumference section 9 of length from the crotch to the cuff of the diaper object 1 serves as a portion located in a covering arrival person's length from the crotch to the cuff. Moreover, the crosswise size of the circumference section 11 of a foot formed in the edges on both sides of the circumference section 9 of length from the crotch to the cuff in the shape of a concave arc is smaller than the crosswise size of the backside waist section 8 and the venter waist section 10, and suits the circumference of a covering arrival person's foot.

[0064] Furthermore, the other end side of the longitudinal direction of the diaper object 1 in an expansion condition is followed in the circumference section 9 of length from the crotch to the cuff and the backside waist section 8, and the opposite side, it is formed in one, the diaper object 1 is suitably bent from this expansion condition, and the venter waist section 10 of said diaper object 1 serves as a portion located in the abdomen side of a covering arrival person's waist. [0065] Next, an operation of the gestalt of the above-mentioned implementation is explained. [0066] First, a covering arrival person's waist is made to face the liquid permeability surface sheet 2 side a covering arrival person's skin side, on the occasion of wearing, the backside waist section 8 of the disposable diaper object 1 of the expansion condition shown in drawing 1 is bent so that the liquid permeability surface sheet 2 which is in this condition and is located in the upper surface may meet a covering arrival person's length from the crotch to the cuff, and while applying the circumference section 9 of length from the crotch to the cuff to length from the crotch to the cuff, the venter waist section 10 is applied to a covering arrival person's abdomen side. In this condition, this the 1st elastic body 12 and 2nd elastic body 13 are seemingly arranged throughout the both-sides edge abbreviation for the non-liquid permeability rear-face sheet 3. Moreover, since this the 1st elastic body 12 and 2nd elastic body 13 cross in the abbreviation center section of the circumference section 9 of length from the crotch to the cuff of the diaper object 1 and it is arranged crosswise in the location of an absorber 4 in the circumference section 9 of this length from the crotch to the cuff, This the 1st elastic body 12 and 2nd elastic body 13 make a longitudinal direction contract the non-liquid permeability rear-face sheet 3 in the both-sides edge abbreviation whole region of the non-liquid permeability rear-face sheet 3. In order for the side edge portion of the non-liquid permeability rear-face sheet 3 to stand up, and to form solid gathers and to shrink the non-liquid permeability rear-face sheet 3 crosswise in the circumference section 9 of length from the crotch to the cuff near the longitudinal direction center section of the diaper object 1, the configuration which is easy to stick to a covering arrival person's body is formed, and the wearing nature of the diaper object 1 improves.

[0067] And by contraction of said 3rd elastic body 22, the inside edge of said non-liquid-permeable sheet 21 rises in the condition of projecting in the shape of a wall, and forms the 2nd solid gathers, and the tip edge of these 2nd solid gathers will be in the condition of sticking to a covering arrival person's length-from-the-crotch-to-the-cuff section both sides by the elasticity of the 3rd elastic body 22.

[0068] Moreover, since the liquid permeability surface sheet 2, the non-liquid permeability rear-face sheet 3, an absorber 4, and the outer layer sheet 5 cut in the shape of \*\*\*\*\*\*, the abbreviation pars intermedia of the longitudinal direction which hits the circumference section 9 of length from the crotch to the cuff lacks them towards the inner direction and the circumference section 11 of a foot is formed, the configuration which makes small the crosswise size of the circumference section 9 of length from the crotch to the cuff of the diaper object 1, and is easy to

stick to a covering arrival persons body can be formed.

[0069] inner [ moreover, / which prepared \*\*\*\*\*\* of an abbreviation concave between the 2nd solid gathers which the non-liquid-permeable sheet 21 forms with the 3rd elastic body 22 arranged by the non-liquid-permeable sheet 21 / of a configuration / large-sized ] — business — even if it uses a pad, \*\*\*\* of elimination liquid is not produced

[0070] Moreover, a covering arrival person is equipped by applying the both-sides section of the backside waist section 8 and the venter waist section 10 to waist, contacting and combining the venter bond parts 20 and 20 of the backside bond parts 19, 19, and 19 of the both-sides section of the backside waist section 8, and the both-sides section of the venter waist section 10.

[0071] And since the elastic body 16 for backside waist and the elastic body 17 for venter waist are arranged throughout the abbreviation for this backside waist section 8 and the venter waist section 10 While elasticity is acquired throughout the backside waist section 8 and the venter waist section 10, and past [draw-down] can be prevented, and the backside waist section 8 and the venter waist section 10 stick to the body by elasticity and being able to prevent the leakage of elimination liquid, such as urine Even if an abdomen blisters by a meal etc., the backside waist section 8 and the venter waist section 10 can prevent extending and screwing up, and can improve a covering arrival person's feeling of wearing.

[0072] Moreover, since said non-liquid permeability rear—face sheet 3 has extended in the method of outside [ section / of said absorber 4 / the longitudinal direction both ends and the crosswise edges—on—both—sides section ], it can prevent that the elimination liquid which is not absorbed by the absorber 4 \*\*\*\* to the outer layer sheet 5 side, and elimination liquid is certainly absorbed with an absorber 4 in it.

[0073] And the non-liquid permeability rear-face sheet 3 and the outer layer sheet 5 which extended in the method of outside [section / of said absorber 4 / the longitudinal direction both ends and the crosswise edges-on-both-sides section ] Since the superposition section of the portion which extended in the circumference section 11 of a foot of said diaper object 1 to the method of outside [section / of an absorber 4 / crosswise / edges-on-both-sides], and the superposition section from the portion which extends in the method of outside [both ends / of an absorber 4 / longitudinal direction] to the both ends of the non-liquid permeability rear-face sheet 3 are formed in the non-fixing section, When the crosswise size of the non-liquid permeability rear-face sheet 3 can be enlarged and the diaper object 1 is made crooked, even if the thickness of the outer layer sheet 5 does not bar crookedness of the non-liquid permeability rear-face sheet 3 and it makes the diaper object 1 crooked, neither a wrinkle nor distortion arises on the non-liquid permeability rear-face sheet 3.

[0074] Moreover, said elastic body 16 for backside waist and said elastic body 17 for venter waist are arranged between the outside sheet piece 14 of said outer layer sheet 5, and the inside sheet piece 15. Since they do not contact a direct covering arrival person, they can improve the touch, while appearance is not spoiled but they can improve appearance, since the 1st elastic body 12 and 2nd elastic body 13 are arranged between said 1st non-liquid permeability rear-face sheet piece 6a and said 2nd non-liquid permeability rear-face sheet piece 6b.

[0075] And when a covering arrival person's body is equipped with the diaper object 1, the 4th elastic body 18 arranged along with the circumference section 11 of a foot of the both sides of the outer layer sheet 5 contracts. The circumference section 11 of a foot of the this about 18 elastic body [4th] outer layer sheet 5 stands up in a covering arrival person's direction of the body, is concluded at the circumference of a covering arrival person's foot, and forms the 3rd solid gathers. The same elimination \*\*\*\*\*\* prevention effect as the solid gathers formed in circumference section of foot 11a of the non-liquid permeability rear—face sheet 3 when a covering arrival person's body is equipped with the diaper object 1 is done so, the diaper object 1 — inner — business — when a covering arrival person's body is equipped as an outer using a pad, while the elimination \*\*\*\*\*\* prevention effect of this diaper object 1 improves, the adhesion of this diaper object 1 and a covering arrival person's body improves.

[0076] as you cancel association with the both-sides section of the backside waist section 8, and the both-sides section of the venter waist section 10 and you, on the other hand, pull the venter waist section 10 on the occasion of removal of the diaper object 1, lie down on your back — the

diaper object 1 can be detached and attached easily, and since it can dragout and remove from under a \*\*\*\*\*\* covering arrival person's waist, workability can be improved.

[0077] It is located in the backside waist section 8 and the venter waist section 10 which the both-sides section of the longitudinal direction of the diaper object 1 combines respectively possible [ attachment and detachment ] with the gestalt of the above-mentioned implementation as mentioned above. In order to arrange the 1st elastic body 12 and 2nd elastic body 13 between the outside sheet piece 14 and the inside sheet piece 15, respectively and to give elasticity crosswise [ of the diaper object 1 ], de\*\* clothes, like the configuration of the conventional trousers mold, as you raise the waist, don't detach and attach it, become width and lie down, while a \*\*\*\*\* covering arrival person can also detach and attach easily and can improve workability Since elasticity is acquired on the whole, the backside waist section 8 and the venter waist section 10 can prevent and stick binding tight too much, and they can improve a covering arrival person's feeling of wearing, without producing the leakage of elimination liquid, such as urine. [0078] and by joint balking with these backside bond parts 19, 19, 19, and 19 and the venter bond parts 20 and 20, a covering arrival person's body is equipped with the diaper object 1, and it secedes from it again — it can make — further — between a covering arrival person's body, and the diaper objects 1 - inner - business - since it can equip with a pad or can be made to secede from it — inner — business — a pad is easily exchangeable.

[0079] In addition, not only string-like rubber but broad band-like rubber etc. is sufficient as said elastic body 16 for backside waist, said elastic body 17 for venter waist, said 3rd elastic body 22, said 1st elastic body 12, and the 2nd elastic body 13, and said elastic body 16 for backside waist and said elastic body 17 for venter waist cannot be restricted for forming by two or more, but they can also make them one thing formed in the shape of a field.

[0080] Moreover, although considered as the configuration which carried out the polymerization of the radial border of the non-liquid-permeable sheets 21 and 21 to the portion which extends in the method of outside [ section / of said absorber 4 of the liquid permeability surface sheet 2 / crosswise / edges-on-both-sides ], and fixed with the gestalt of this operation With the configuration which made shorter than the extension section of the non-liquid permeability rear-face sheet 3 the portion which extends in the method of outside [ section / of the absorber 4 of the liquid permeability surface sheet 2 / crosswise / edges-on-both-sides ], the polymerization of the outside edge of the non-liquid-permeable sheets 21 and 21 is carried out to the extension section of the liquid permeability surface sheet 2 and the non-liquid permeability rear-face sheet 3, and it fixes.

[0081] and with the gestalt of operation shown in above-mentioned drawing 1 and drawing 2 Said the 1st elastic body 12 and said 2nd elastic body 13 cross in the abbreviation center section of the circumference section 11 of a foot of said diaper object 1, and are set to the crosswise center-section approach of the diaper object 1 rather than the crossing portion. The pars intermedia of said 1st elastic body 12 is arranged in the venter waist section 10 side rather than the longitudinal direction center section of the diaper object 1 [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ]. Moreover, although the pars intermedia of said 2nd elastic body 13 was considered as the configuration arranged crosswise, respectively in the condition of having been arranged in the backside waist section 8 side rather than the longitudinal direction center section of the diaper object 1 [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ] In the gestalt of operation shown in said drawing 1 and drawing 2 as shown in drawing 3 Said the 1st elastic body 12 and 2nd elastic body 13 do not cross in the longitudinal direction center section of said diaper object 1, but it sets to the crosswise center-section approach of the diaper object 1. The pars intermedia of said 1st elastic body 12 is arranged in the backside waist section 8 side rather than the longitudinal direction center section of the diaper object 1 [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ]. Moreover, the pars intermedia of said 2nd elastic body 13 can also be changed into the condition of having been arranged crosswise, respectively in the condition of having been arranged in the venter waist section 10 side rather than the longitudinal direction center section of the diaper object 1 [ near the crosswise center section of the circumference section 9 of said length from the crotch to the cuff ].

of operation shown in above-mentiones Vawing 1 and drawing 2 [0082] moreover, with the gest The longitudinal direction size and the crosswise size of said outer layer sheet 5 of the diaper object 1 are larger than the longitudinal direction size and the crosswise size of said non-liquid permeability rear-face sheet 3. Although fixing association is carried out in the portion in which it laid on top of said outer layer sheet 5, and the absorber 4 was arranged so that it may not project in the method of outside [ section / of the outer layer sheet 5 / the longitudinal direction bothends edge and the crosswise edges-on-both-sides section ], the longitudinal direction both-ends edge and the crosswise edges-on-both-sides section of the non-liquid permeability rear-face sheet 3 As shown in drawing 4, the crosswise size between circumference section of foot 11a of the non-liquid permeability rear-face sheet 3 of the diaper object 1 and 11a is formed more greatly than the crosswise size of the circumference section 11 of a both-sides foot of the outer layer sheet 5. Said the 1st elastic body 12 and said 2nd elastic body 13 can also be located and arranged in a crosswise edges-on-both-sides section side rather than said 4th elastic body 18 in the circumference section 11 of these both-sides foot.

[0083] With the 1st elastic body 12 and 2nd elastic body 13, the circumference sections 11a and 11a of a foot of the both sides of the non-liquid permeability rear-face sheet 3 will be in a standing-up condition, and this diaper object 1 will form solid gathers. In a busy condition, the edges-on-both-sides section of the non-liquid permeability rear-face sheet 3 can hardly overflow the edges-on-both-sides section of the outer layer sheet 5, the crosswise size of the non-liquid permeability rear-face sheet 3 can be enlarged, and \*\*\*\* of the elimination liquid from the diaper object 1 can be prevented certainly.

[0084] inner [ moreover, ] -- business, in case a covering arrival person's body is equipped with the diaper object 1 using a pad inner -- business, even when the crosswise size of a pad is larger than the crosswise size of the circumference section 11 of a foot of the outer layer sheet 5 The crosswise size of the circumference sections 11a and 11a of a foot of the non-liquid permeability rear-face sheet 3 is formed more greatly than the crosswise size of the circumference sections 11 and 11 of a foot of the outer layer sheet 5. The size between the both-ends flanks of the 1st elastic body 12 arranged along with the edges-on-both-sides section of the cross direction of the non-liquid permeability rear-face sheet 3 and the 2nd elastic body 13 can be enlarged. innerbusiness, if the crosswise size of a pad is less than a size between the both-ends flanks of this 1st elastic body 12 and the 2nd elastic body 13 The 1st elastic body 12 and 2nd elastic body 13 make a longitudinal direction contract the non-liquid permeability rear-face sheet 3 in the bothsides edge abbreviation whole region of the non-liquid permeability rear-face sheet 3, also where a pad is used, inner — business — since the side edge portion of the non-liquid permeability rearface sheet 3 stands up and solid gathers can be formed certainly — inner [ comparatively big ] business — a pad can be used, and while preventing that elimination liquid \*\*\*\* from this diaper object 1, the adhesion of this diaper object 1 and a covering arrival person's body improves. [0085] Moreover, in the gestalt of operation shown in above-mentioned drawing 1 and drawing 2 although the 4th elastic body 18 and 18 was arranged along with the circumference section 11 of a biped of the outer layer sheet 5 As shown in drawing 5 one side of the 4th elastic body 18 If a both-ends side is applied to the circumference section 11 of a foot from the backside waist section 8, it arranges along with the edges-on-both-sides section of the cross direction of the outer layer sheet 5. While being crooked in the direction in which pars intermedia crosses the circumference section 9 of said length from the crotch to the cuff in the longitudinal direction abbreviation center section of the circumference section 11 of a foot and arranging crosswise in the circumference section 9 of length from the crotch to the cuff, another side of said 4th elastic body 18 If a both-ends side is missing from the circumference section 11 of a foot from the venter waist section 10, it arranges along with the edges-on-both-sides section of the cross direction of the outer layer sheet 5. It is crooked in the direction in which pars intermedia crosses the circumference section 9 of said length from the crotch to the cuff in the longitudinal direction abbreviation center section of the circumference section 11 of a foot, it considers as the configuration which approaches one [ said ] 4th elastic body 18 crosswise in the circumference section 9 of length from the crotch to the cuff, and is arranged in parallel, and the 3rd solid gathers form in the circumference section 11 of a foot of the outer layer sheet 5 -- having inner — business — the \*\*\*\* prevention effect of the elimination liquid when using a pad together can be heightened.

[0086] Next, the configuration of the gestalt of other operations in the disposable absorptivity goods of this invention is explained with reference to  $\frac{1}{2}$  drawing  $\frac{1}{2}$ .

[0087] On the other hand, the backside waist section 8 of the outer layer sheet 5 in the gestalt of operation shown in <u>drawing 1</u> and <u>drawing 2</u> diaper object 1A as an absorptivity goods object The side edge section 24 and the other side edge 25, In the condition of the venter waist section 10 of the outer layer sheet 5 that, on the other hand, combine the side edge section 26 and the other side edge 27 with adhesives etc., and the liquid permeability surface sheet 2 of diaper object 1A becomes an inside side It forms in the upper surface at the waist side opening 29 by which opening formation was carried out, and the trousers configuration which has the circumference side openings 30 and 30 of a foot of a pair on the inferior surface of tongue as opening formation was carried out. Other configurations are the same as the configuration shown in <u>drawing 1</u> and drawing 2.

[0088] Next, an operation of the gestalt of the above-mentioned implementation is explained. [0089] First, since diaper object 1A is formed in the trousers configuration on the occasion of wearing as shown in <u>drawing 6</u>, a covering arrival person can be easily equipped like trousers. [0090] moreover, the inside of the solid gathers formed in the non-liquid permeability rear-face sheet 3 with the 1st and 2nd elastic bodies 12 and 13 when it was not necessary to necessarily arrange the non-liquid-permeable sheets 21 and 21 and the non-liquid-permeable sheets 21 and 21 were not arranged, although the 2nd solid gathers by the non-liquid-permeable sheets 21 and 21 were formed with the gestalt of said the operation of each — inner — business — it is used, arranging a pad.

[0091] in addition, the gestalt of this operation — setting — inner — business — between the 2nd solid gathers formed with the 3rd elastic body 22 arranged in the inside edge of the non-liquid-permeable sheets 21 and 21 when using a pad — inner — business — the pad is arranged beforehand and a covering arrival person is equipped with this diaper object 1A. since diaper object 1A is presenting the trousers configuration — inner — business — even if it is in the condition which used the pad, attachment and detachment of diaper object 1A can be easily performed like trousers.

[0092] Next, the configuration of the gestalt of other operations in the disposable absorptivity goods of this invention is explained with reference to <u>drawing 7</u>.

[0093] As shown in drawing 7, the diaper object 1 as an absorptivity goods object has main part section of absorptivity goods 4a which consists of a liquid permeability surface sheet 2, a non-liquid permeability rear-face sheet 3, and an absorber 4, and the outer layer sheet 5.

[0094] Said liquid permeability surface sheet 2 is formed in a \*\*\*\* length rectangle configuration in the web material which has liquid permeability and permeability so that elimination liquid can be absorbed to said absorber 4.

[0095] An absorber 4 is arranged in the background of this liquid permeability surface sheet 2. This absorber 4 absorbs elimination liquid, such as urine, for example, is a material which is mainly concerned with pulp, and is formed in the \*\*\*\*\*\*\* rectangle configurations of said liquid permeability surface sheet 2 and an abbreviation same size with the material which contained material, such as a high-polymer absorbent, in the part.

[0096] Moreover, said non-liquid permeability rear-face sheet 3 is formed of 1st non-liquid permeability rear-face sheet piece 6a, 2nd non-liquid permeability rear-face sheet piece 6b, and 3rd non-liquid permeability rear-face sheet piece 6c. This 3rd non-liquid permeability rear-face sheet piece 6c is formed in the sheet piece which has liquid impermeability, and the longitudinal direction and the crosswise size are formed a little more greatly than the longitudinal direction and the crosswise size of said absorber 4. And said absorber 4 is arranged in the surface side abbreviation center section of this 3rd non-liquid permeability rear-face sheet piece 6c. Moreover, the location in which said absorber 4 by the side of the rear face of this 3rd non-liquid permeability rear-face sheet piece 6c is arranged was put on the abbreviation center section of said 2nd non-liquid permeability rear-face sheet piece 6b, and has fixed with adhesives etc. And this 2nd non-liquid permeability rear-face sheet piece 6a, and has fixed with adhesives etc. With this 1st non-liquid permeability rear-face sheet piece 6a and 2nd non-liquid permeability rear-face sheet piece 6b,

the backside waist section (not shown), the circumference section of length from the crotch to the cuff (not shown), and the venter waist section (not shown) are formed in a longitudinal direction in one one by one.

[0097] And it sets [ from the backside waist section (not shown) and the venter waist section (not shown) of said 1st non-liquid permeability rear-face sheet piece 6a and said 2nd non-liquid permeability rear-face sheet piece 6b ] in the circumference section of length from the crotch to the cuff (not shown), respectively. Between 1st non-liquid permeability rear-face sheet piece 6a and 2nd non-liquid permeability rear-face sheet piece 6b, where the 1st below-mentioned elastic body 12 and 2nd below-mentioned elastic body (not shown) are elongated, it has arranged and fixed.

[0098] Moreover, the periphery section of said 3rd non-liquid permeability rear-face sheet piece 6c wraps in the periphery of said absorber 4, is combined with the periphery section of said liquid permeability surface sheet 2 with adhesives etc. in the surface side periphery section of an absorber 4, and sealing of said absorber 4 is carried out by said liquid permeability surface sheet 2 and 3rd non-liquid permeability rear-face sheet piece 6c.

[0099] And the outer layer sheet 5 piles up the inside sheet piece 15 which has permeability and liquid impermeability, and it joins together in one and it is formed in the outside sheet piece 14 which has liquid impermeability.

[0100] This outer layer sheet 5 in the state of expansion Moreover, the backside waist section (not shown), It is formed in a rectangle configuration symmetrical with \*\*\*\* with the center line which met the longitudinal direction while the circumference section of length from the crotch to the cuff (not shown) and the venter waist section (not shown) were formed in the longitudinal direction of the diaper object 1 in one one by one. And the circumference section 11 of a foot is formed, the edges on both sides of the cross direction of the circumference section of this length from the crotch to the cuff (not shown) are arranged and fixed between the outside sheet piece 14 and the inside sheet piece 15 along with the circumference section 11 of a foot of the both sides of the outer layer sheet 5, after the 4th elastic body 18 and 18 has developed.

[0101] Moreover, fixing association of the portion in which main part section of absorptivity goods 4a which has said liquid permeability surface sheet 2, the non-liquid permeability rear-face sheet 3, and an absorber 4 was piled up and arranged in the abbreviation center section of this outer layer sheet 5, and said absorber 4 of said non-liquid permeability rear-face sheet 3 was arranged is carried out by adhesives 3a etc. And the superposition section of this non-liquid permeability rear-face sheet 3 and said outer layer sheet 5 Set even from the portion which extends in the method of outside [ section / of an absorber 4 / crosswise / edges-on-both-sides ], and the portion which extends in the method of outside [ both ends / of an absorber 4 / longitudinal direction ] to the longitudinal direction both ends of the non-liquid permeability rear-face sheet 3, and it is formed in the non-fixing section. Moreover, fixing association of the longitudinal direction both ends of said non-liquid permeability rear-face sheet 3 is carried out with adhesives etc. at said outer layer sheet 5.

[0102] In addition, the longitudinal direction size and the crosswise size of said outer layer sheet 5 are larger than the longitudinal direction size and the crosswise size of said non-liquid permeability rear-face sheet 3.

[0104] And other configurations are the same as the gestalt of operation shown in  $\frac{drawing 1}{drawing 2}$ .

[0105] Next, an operation of the sestalt of the above-mentioned implementation is explained. [0106] First, on the occasion of wearing, like the gestalt of operation shown in <u>drawing 1</u> and <u>drawing 2</u>, the diaper object 1 of an expansion condition as shown in <u>drawing 7</u> is stuck in a covering arrival person's body, and it equips with it.

[0107] And by contraction of said 3rd elastic body 22, the inside edge of said non-liquid-permeable sheet 21 rises in the condition of projecting in the shape of a wall, and forms the 2nd solid gathers, and the tip edge of these 2nd solid gathers will be in the condition of sticking to a covering arrival person's length-from-the-crotch-to-the-cuff section both sides by the elasticity of the 3rd elastic body 22.

[0108] And it applies to the side front periphery section from the background of an absorber 4, and since 3rd non-liquid permeability rear-face sheet piece 6c has wrapped in and joined together, \*\*\*\* of the elimination liquid which the absorber 4 absorbed does not arise, and elimination liquid is certainly absorbed with an absorber 4.

[0109] Moreover, since said non-liquid permeability rear-face sheet 3 has extended in the method of outside [ section / of said absorber 4 / the longitudinal direction both ends and the crosswise edges-on-both-sides section ], it can prevent that the elimination liquid which is not absorbed by the absorber 4 \*\*\*\* to the outer layer sheet 5 side, and elimination liquid is certainly absorbed with an absorber 4 in it.

[0110] And the non-liquid permeability rear-face sheet 3 and the outer layer sheet 5 which extended in the method of outside [ section / of said absorber 4 / the longitudinal direction both ends and the crosswise edges-on-both-sides section ] Since the superposition section of the portion which extended in the circumference section 11 of a foot of said diaper object 1 to the method of outside [ section / of an absorber 4 / crosswise / edges-on-both-sides ], and the superposition section from the portion which extends in the method of outside [ both ends / of an absorber 4 / longitudinal direction ] to the both ends of the non-liquid permeability rear-face sheet 3 are formed in the non-fixing section, When the crosswise size of the non-liquid permeability rear-face sheet 3 can be enlarged and the diaper object 1 is made crooked, even if the thickness of the outer layer sheet 5 does not bar crookedness of the non-liquid permeability rear-face sheet 3 and it makes the diaper object 1 crooked, neither a wrinkle nor distortion arises on the non-liquid permeability rear-face sheet 3.

[0111] Moreover, since they do not contact a direct covering arrival person, they can improve the touch, while appearance is not spoiled but they can improve appearance, since the 1st elastic body 12 and 2nd elastic body (not shown) are arranged between said 1st non-liquid permeability rear-face sheet piece 6a and said 2nd non-liquid permeability rear-face sheet piece 6b.
[0112] And when a covering arrival person's body is equipped with the diaper object 1, the 4th elastic body 18 arranged along with the circumference section 11 of a foot of the both sides of the outer layer sheet 5 contracts. The circumference section 11 of a foot of the this about 18 elastic body [4th] outer layer sheet 5 stands up in a covering arrival person's direction of the body, is concluded at the circumference of a covering arrival person's foot, and forms the 3rd solid gathers. The same elimination \*\*\*\*\*\* prevention effect as the solid gathers formed in circumference section of foot 11a of the non-liquid permeability rear-face sheet 3 when a covering arrival person's body is equipped with the diaper object 1 is done so. the diaper object 1 — inner — business — when a covering arrival person's body is equipped as an outer using a pad, while the elimination \*\*\*\*\*\* prevention effect of this diaper object 1 improves, the adhesion of this diaper object 1 and a covering arrival person's body improves.

[0113] as you cancel association with the both-sides section of the backside waist section (not shown), and the both-sides section of the venter waist section (not shown) and you, on the other hand, pull the venter waist section (not shown) on the occasion of removal of the diaper object 1, lie down on your back — the diaper object 1 can be detached and attached easily, and since it can draw out and remove from under a \*\*\*\*\*\* covering arrival person's waist, workability can be improved.

[0114] It is located in the backside waist section (not shown) and the venter waist section (not shown) which the both-sides section of the longitudinal direction of the diaper object 1 combines respectively possible [ attachment and detachment ] with the gestalt of the above-mentioned implementation. In order to arrange the 1st elastic body 12 and 2nd elastic body (not shown)

between the outside sheet piece. 4 and the inside sheet piece 15, respectely and to give elasticity crosswise [ of the diaper object 1 ], de\*\* clothes, like the configuration of the conventional trousers mold, as you raise the waist, don't detach and attach it, become width and lie down, while a \*\*\*\*\* covering arrival person can also detach and attach easily and can improve workability Since elasticity is acquired on the whole, the backside waist section (not shown) and the venter waist section (not shown) can prevent and stick binding tight too much, and they can improve a covering arrival person's feeling of wearing, without producing the leakage of elimination liquid, such as urine.

[0115] and by joint balking with this backside bond part (not shown) and a venter bond part (not shown), a covering arrival person's body is equipped with the diaper object 1, and it secedes from it again — it can make — further — between a covering arrival person's body, and the diaper objects 1 — inner — business — since it can equip with a pad or can be made to secede from it — inner — business — a pad is easily exchangeable.

[0116] In addition, not only string-like rubber but broad band-like rubber etc. is sufficient as said 1st elastic body 12, the 2nd elastic body (not shown), and said 3rd elastic body 22.

[0117] Next, the configuration of the gestalt of other operations in the disposable absorptivity goods of this invention is explained with reference to  $\frac{drawing 8}{drawing 8}$ .

[0118] Although considered as the configuration which the outside edge side of the non-liquid-permeable sheets 21 and 21 extended in the method of outside [ section / of an absorber 4 / crosswise / both-sides ], respectively, was arranged, and has fixed on the non-liquid permeability rear-face sheet 3 of main part section of absorptivity goods 4a with the gestalt of operation shown in said drawing 7 In the gestalt of this operation, along with the edges-on-both-sides section of an absorber 4, the clinch polymerization of the outside edge of the non-liquid-permeable sheets 21a and 21a is carried out, and it is combined with a rear-face side with adhesives etc.

[0119] As shown in drawing 8, the diaper object 1 is set in the abbreviation center section of the outer layer sheet 5. Main part section of absorptivity goods 4a which has the non-liquid permeability rear-face sheet 3 which carried out the polymerization of said liquid permeability surface sheet 2, 1st non-liquid permeability rear-face sheet piece 6a, 2nd non-liquid permeability rear-face sheet piece 6b, and the 3rd non-liquid permeability rear-face sheet piece 6c, and formed them, and an absorber 4 is piled up and arranged. Fixing association of the portion in which said absorber 4 of said non-liquid permeability rear-face sheet 3 was arranged is carried out by adhesives 3a etc., and the non-liquid-permeable sheets 21a and 21a of two sheets are arranged near the edges on both sides of said absorber 4.

[0120] These non-liquid-permeable sheets 21a and 21a of two sheets made the ulnar margin which counters mutually face the location near the edges on both sides of an absorber 4, and are piled up in the shape of symmetry, respectively. And this inside edge side of the non-liquidpermeable sheets 21a and 21a of two sheets and the liquid permeability surface sheet 2 of main part section of absorptivity goods 4a are the non-fixing sections, respectively, and it forms in the free end. Moreover, the outside edge side of these non-liquid-permeable sheets 21a and 21a is turned up along with the edges-on-both-sides section of an absorber 4 at a rear-face side. In the rear-face side of an absorber 4, set a gap and counter, and between said 3rd non-liquid permeability rear-face sheet piece 6c of main part section of absorptivity goods 4a, and said 2nd non-liquid permeability rear-face sheet piece 6b, carry out a polymerization and it is arranged. The contact surface of the outside edge of said non-liquid-permeable sheets 21a and 21a of two sheets and said 3rd non-liquid permeability rear-face sheet piece 6c and the contact surface of the outside edge of said non-liquid-permeable sheets 21a and 21a of two sheets and said 2nd non-liquid permeability rear-face sheet piece 6b have fixed with adhesives etc., respectively. And after the 3rd elastic body 22 and 22 had developed along the inside edge of the free end, respectively, it was arranged by these non-liquid-permeable sheets 21a and 21a of two sheets, and to them, it has fixed with adhesives.

[0121] And other configurations are the same as the gestalt of operation shown in  $\frac{\text{drawing 7}}{\text{0122}}$ . [0122] Next, an operation of the gestalt of the above-mentioned implementation is explained. [0123] First, on the occasion of wearing, like the gestalt of operation shown in  $\frac{\text{drawing 1}}{\text{drawing 2}}$  and drawing 2, the diaper object 1 of an expansion condition as shown in  $\frac{\text{drawing 8}}{\text{drawing 8}}$  is stuck in a

covering arrival person's body; it equips with it.

[0124] And by contraction of said 3rd elastic body 22, the inside edge of said non-liquid-permeable sheet 21a rises in the condition of projecting in the shape of a wall, and forms the 2nd solid gathers, and the tip edge of these 2nd solid gathers will be in the condition of sticking to a covering arrival person's length-from-the-crotch-to-the-cuff section both sides by the elasticity of the 3rd elastic body 22.

[0125] inner [ moreover, / which prepared \*\*\*\*\*\* of an abbreviation concave between the 2nd solid gathers which the non-liquid-permeable sheet 21 forms with the 3rd elastic body 22 arranged in non-liquid-permeable sheet 21a / of a configuration / large-sized ] — business — even if it uses a pad, \*\*\*\* of elimination liquid is not produced

[0126] And it applies to the side front periphery section from the background of an absorber 4, and since 3rd non-liquid permeability rear-face sheet piece 6c has wrapped in and joined together, \*\*\*\* of the elimination liquid which the absorber 4 absorbed does not arise, and elimination liquid is certainly absorbed with an absorber 4.

[0127] Furthermore, since the outside edge of the non-liquid-permeable sheets 21a and 21a is arranged along with the edges-on-both-sides section of an absorber 4 between 3rd non-liquid permeability rear-face sheet piece 6c and 2nd non-liquid permeability rear-face sheet 6b, the \*\*\*\* prevention effect of the elimination liquid which the absorber 4 absorbed increases, and elimination liquid is certainly absorbed with an absorber 4.

[0128] Moreover, other operations are the same as an operation of the gestalt of operation shown in drawing 7.

[0129] In addition, with the gestalt of operation shown in above-mentioned drawing 1 thru/or drawing 8, although the disposable diaper was explained, it is applicable to various absorptivity goods.

[0130] Next, the gestalt of implementation of the manufacture method of the disposable absorptivity goods of this invention is explained based on <u>drawing 9</u> thru/or <u>drawing 18</u>.

[0131] Diaper object 1B used as the absorptivity goods object manufactured by this manufacture method is a trousers configuration which has the circumference side openings 30 and 30 of a foot of the pair by which opening formation was carried out on the upper surface on the inferior surface of tongue by the waist side opening 29 by which opening formation was carried out, and the circumference section 11 of a both-sides foot by combining the edge of the backside waist section 8, and the edge of the venter waist section 10 as it is shown in drawing 6.

[0132] First, according to the production process shown in <u>drawing 9</u>, on the 1st [ of the long picture moved to a longitudinal direction ] non-liquid permeability rear—face sheet object 31, make it elongate, respectively, the 1st long elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, and it is crooked crosswise by turns, arranges in the longitudinal direction of the 1st non-liquid permeability rear—face sheet object 31 of said long picture, and joins together with adhesives etc.

[0133] Next, according to the production process shown in <u>drawing 10</u>, on the 1st [ of said long picture ] non-liquid permeability rear-face sheet object 31, on both sides of said 1st elastic string-like object 32 and said 2nd elastic string-like object 33, the 2nd long non-liquid permeability rear-face sheet object 34 is piled up, it joins together with adhesives etc., and the long non-liquid permeability rear-face sheet component 36 is formed.

[0134] Next, it is located according to the production process shown in <u>drawing 11</u> at the portion which said 1st elastic string-like object 32 and said 2nd elastic string-like object 33 approached on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object 34, and the longitudinal direction of this absorber 4 is arranged according to the cross direction of the 2nd non-liquid permeability rear-face sheet object 34 of said long picture, and an absorber 4 is combined with adhesives etc.

[0135] Next, according to the production process shown in <u>drawing 12</u>, on the 2nd [ of said long picture ] non-liquid permeability rear—face sheet object 34, on both sides of said absorber, the long liquid permeability surface sheet object 35 is arranged, and it joins together with adhesives etc.

[0136] Next, the liquid permeability surface sheet object 35 of the long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects 31 and 34 and long absorbers 4

Jing-like object 32 and the 2nd elastic S which fastened said 1st elastic mg-like object 33 according to the production process shown in drawing 13 In the portion which the gap of the adjoining absorber 4, the 1st elastic string-like object 32 between four, and the 2nd elastic stringlike object 33 isolated most Crosswise [ of the long non-liquid permeability rear-face sheet component 36 and the long liquid permeability surface sheet object 35], it cuts from the bothsides section along with the both-ends side of the 1st elastic string-like object 32 and the 2nd elastic string-like object 33, and main part section of absorptivity goods 4a is formed in it. [0137] Main part section of absorptivity goods 4a manufactured at this production process An absorber 4 is arranged between the liquid permeability surface sheet 2 formed with the long liquid permeability surface sheet object 35, and the non-liquid permeability rear-face sheet 3 formed with the long non-liquid permeability rear-face sheet component 36. The circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot, and the venter waist section 10 are formed in the backside waist section 8 and the both-sides section in one one by one at a longitudinal direction. The 1st elastic body 12 which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff, and was formed with the 1st elastic string-like object 32 Apply both ends to the circumference section 11 of a foot from the backside waist section 8, and while arranging and joining together along with the side edge section of the cross direction of the non-liquid permeability rear-face sheet 3, it is crooked in the direction which crosses the circumference section 9 of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in the non-liquid permeability rear-face sheet 3 of a circumference section of length from the crotch to the cuff 9 smell lever. The 2nd elastic body 13 formed with the 2nd elastic string-like object 33 Both ends are applied to the circumference section 11 of a foot from the venter waist section 10, and while arranging and joining together along with the side edge section of the cross direction of the non-liquid permeability rear-face sheet 3, it is crooked in the direction which crosses the circumference section 9 of said length from the crotch to the cuff, pars intermedia is arranged crosswise in the non-liquid permeability rear-face sheet 3 of a circumference section of length from the crotch to the cuff 9 smell lever, and it is combined.

[0138] Next, in the condition of having made the crosswise both-sides section on the outside sheet object 37 of the long picture moved to the longitudinal direction elongating the long elastic member 38 for backside waist, and the elastic member 39 for venter waist toward the longitudinal direction of the outside sheet object 37 of this long picture according to the production process shown in drawing 14, it arranges in two or more juxtaposition, respectively, and fixes. [0139] Next, according to the production process shown in drawing 15, on the outside sheet object 37 of said long picture, it inserts, where said elastic member 38 for backside waist and the elastic member 39 for venter waist are expanded, and the outer layer sheet component 41 of the long picture which piled up the long inside sheet object 40, arranged, and was combined is formed. [0140] According to the production process shown in drawing 16, next, on the outer layer sheet component 41 of this long picture Turn the longitudinal direction of said main part section of absorptivity goods 4a formed at the production process shown in said drawing 15 crosswise [ of the outer layer sheet component 41 ], and this main part section of absorptivity goods 4a is arranged. The superposition section with the outer layer sheet component 41 of the portion which extended at least to the method of outside [ section / of the absorber 4 of the non-liquid permeability rear-face sheet 3 / crosswise / edges-on-both-sides ] of the circumference section 11 of a foot of said main part section of absorptivity goods 4a is removed. The non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a is combined with adhesives etc. on the outer layer sheet component 41. [0141] Next, by folding two of said outer layer sheet components 41, carrying out them along with a longitudinal direction, according to the production process shown in drawing 17 from a crosswise center section, combining between said adjoining main part section of absorptivity goods 4a, and 4a with adhesives etc. crosswise, and forming a bond part 42 The waist side opening 29 is formed between this bond part 42 and 42. After the joint production process of this outer layer sheet component 41 Said outer layer sheet component 41 is cut from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and the circumference side openings 30 and 30 are foot of the pair in diaper object 1B are formed.

[0142] And according to the production process shown in <u>drawing 18</u>, the bond part 42 of said said outer layer sheet component 41 folded in half is cut crosswise along the center position of this bond part 42, and diaper object 1B as an absorptivity goods object is formed. Thus, formed diaper object 1B has the outer layer sheet 5 formed with the outer layer sheet component 41, and forms in a longitudinal direction the backside waist section 8, the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot in the both-sides section, and the venter waist section 10 in one one by one, and said absorber 4 is arranged in the circumference section 9 of length from the crotch to the cuff at least.

[0143] And moving the long non-liquid permeability rear—face sheet component 36, the 1st elastic string—like object 32, the 2nd elastic string—like object 33, and the long liquid permeability surface sheet object 35 to a longitudinal direction, it piles up in order and main part section of absorptivity goods 4a can be manufactured. Main part section of absorptivity goods 4a which cuts crosswise and is formed the liquid permeability surface sheet object 35 of the long picture which fastened the long non-liquid permeability rear—face sheet component 36 and a long absorber 4 Since it can arrange on the outer layer sheet component 41 moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, increase in efficiency of the manufacturing process of diaper object 1B as absorptivity goods and easy—ization of manufacture can be attained.

[0144] Moreover, by making a longitudinal direction go and come back to the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 to the travelling direction of the long non—liquid permeability rear—face sheet component 36 Since the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non—liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non—liquid permeability rear—face sheet component 36 from a right angle to the flow direction which goes to the longitudinal direction of the long non—liquid permeability rear—face sheet component 36, and diaper object 1B can be manufactured easily.

[0145] Moreover, diaper object 1B formed in the trousers configuration can be easily manufactured by folding two outer layer sheet components 41, carrying out them along with a longitudinal direction, from a crosswise center section, combining between main part section of absorptivity goods 4a, and 4a crosswise, forming a bond part 42, and establishing this bond part 42, the production process which forms the waist side opening 29 among 42, and the production process which cuts said bond part 42 crosswise [ of said outer layer sheet component 41 ]. [0146] Next, the gestalt of other operations of the manufacture method of the disposable absorptivity goods of this invention is explained based on drawing 9 thru/or drawing 15, drawing 18 and drawing 22, and drawing 23.

[0147] The production process which cuts the outer layer sheet component 41 from the bothsides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and forms the circumference side openings 30 and 30 of a foot of the pair in diaper object 1B in the gestalt of said operation Although it was made to carry out after the production process which folds two outer layer sheet components 41, carries out them along with a longitudinal direction from a crosswise center section, combines between said adjoining main part section of absorptivity goods 4a, and 4a with adhesives etc. crosswise, and forms a bond part 42 In the gestalt of this operation, on the long outer layer sheet component 41, turn the longitudinal direction of main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and this main part section of absorptivity goods 4a is arranged. The superposition section with the outer layer sheet component 41 of the portion which extended at least to the method of outside [ section / of the absorber 4 of the nonliquid permeability rear-face sheet 3 / crosswise / edges-on-both-sides ] of the circumference section 11 of a foot of said main part section of absorptivity goods 4a is removed. The non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of

absorptivity goods 4a is perform after the production process combined the adhesives etc. on the outer layer sheet component 41.

[0148] Therefore, the gestalt of this operation is shown in drawing 15. On the outside sheet object 37 of said long picture, where said elastic member 38 for backside waist and the elastic member 39 for venter waist are expanded, insert, and after the production process which forms the outer layer sheet component 41 of the long picture which piled up the long inside sheet object 40, arranged, and was combined, are shown at drawing 22. Turn the longitudinal direction of said main part section of absorptivity goods 4a formed on the long outer layer sheet component 41 at the production process shown in drawing 15 crosswise [ of the outer layer sheet component 41 ], and this main part section of absorptivity goods 4a is arranged. After the production process combined on the outer layer sheet component 41, the non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a The outer layer sheet component 41 is cut from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and the circumference side openings 30 and 30 of a foot of the pair in diaper object 1B are formed. [0149] Next, as shown in drawing 23, from a crosswise center section, along with a longitudinal direction, two of said outer layer sheet components 41 are folded, they are carried out, between said adjoining main part section of absorptivity goods 4a and 4a is combined crosswise with adhesives etc., a bond part 42 is formed, and this bond part 42 and the production process which forms the waist side opening 29 among 42 are performed.

[0150] Next, according to the production process shown in <u>drawing 18</u>, the bond part 42 of said outer layer sheet component 41 folded in half is cut crosswise along the center position of this bond part 42, and diaper object 1B as an absorptivity goods object is formed.

[0151] In addition, the production process shown in <u>drawing 9</u> thru/or <u>drawing 14</u> is the same as the gestalt of said operation.

[0152] An operation of the gestalt of this operation is explained.

[0153] The long non-liquid permeability rear-face sheet component 36, the 1st elastic string-like object 32, the 2nd elastic string-like object 33, and the long liquid permeability surface sheet object 35 are piled up in order, and main part section of absorptivity goods 4a can be manufactured. Since this main part section of absorptivity goods 4a can be arranged on the outer layer sheet component 41 moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, it can attain increase in efficiency of the manufacturing process of diaper object 1B as absorptivity goods, and easy-ization of manufacture.

[0154] Moreover, since the 1st elastic string-like object 32 and the 2nd elastic string-like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and arranges in the longitudinal direction of the 1st long non-liquid permeability rear-face sheet object 31 and can combine with it Diaper object 1B which arrangement fixing of the 1st elastic body 12 and 2nd elastic body 13 could be carried out according to the flow direction where the long non-liquid permeability rear-face sheet component 36 goes to a longitudinal direction, and formed them in the trousers configuration can be manufactured easily.

[0155] Next, the gestalt of other operations of the manufacture method of the disposable absorptivity goods of this invention is explained based on <u>drawing 9</u> thru/or <u>drawing 16</u> and <u>drawing 24</u>, and <u>drawing 25</u>.

[0156] The production process which cuts the outer layer sheet component 41 from the both—sides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and forms the circumference side openings 30 and 30 of a foot of the pair in diaper object 1B in the gestalt of said operation On the long outer layer sheet component 41, turn the longitudinal direction of main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and this main part section of absorptivity goods 4a is arranged. Although it was made to perform the non-liquid permeability rear—face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a

after the production process classified with adhesives etc. on the outer layer sheet component 41 In the gestalt of this operation, the bond part 42 of said outer layer sheet component 41 folded in half is cut crosswise along the center position of this bond part 42, and it carries out after the production process which forms diaper object 1B as an absorptivity goods object.

[0157] As shown in <u>drawing 16</u>, in this manufacture method therefore, on the long outer layer sheet component 41 Turn the longitudinal direction of main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and this main part section of absorptivity goods 4a is arranged. As the non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a is shown at <u>drawing 24</u> after the production process combined with adhesives etc. on the outer layer sheet component 41 Two outer layer sheet components 41 are folded along with a longitudinal direction from a crosswise center section, it carries out, between adjoining main part section of absorptivity goods 4a and 4a is combined crosswise with adhesives etc., and the waist side opening 29 is formed between bond

[0158] Next, as shown in <u>drawing 25</u>, after cutting a bond part 42 crosswise [ of the outer layer sheet component 41 ], the production process which cuts the outer layer sheet 5 from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of main part section of absorptivity goods 4a, forms the circumference side openings 30 and 30 of a foot of the pair in diaper object 1B, and forms diaper object 1B as an absorptivity goods object is performed.

parts 42.

[0159] In addition, the production process shown in <u>drawing 9</u> thru/or <u>drawing 15</u> is the same as the gestalt of said operation.

[0160] With the gestalt of this operation, the long non-liquid permeability rear-face sheet component 36, the 1st elastic string-like object 32, the 2nd elastic string-like object 33, and the long liquid permeability surface sheet object 35 are piled up, main part section of absorptivity goods 4a can be manufactured, increase in efficiency of the manufacturing process of diaper object 1B as absorptivity goods and easy-ization of manufacture can be attained, and diaper object 1B formed in the trousers configuration can be manufactured easily.

[0161] Next, the gestalt of other operations of the manufacture method of the disposable absorptivity goods of this invention is explained based on  $\underline{\text{drawing 9}}$  thru/or  $\underline{\text{drawing 15}}$  and  $\underline{\text{drawing 19}}$  thru/or  $\underline{\text{drawing 21}}$ .

[0162] Diaper object 1C used as the absorptivity goods object manufactured by this manufacture method The absorber 4 arranged between the liquid permeability surface sheet 2, the non-liquid permeability rear-face sheet 3, and the these liquid permeability surface sheet 2 and the nonliquid permeability rear-face sheet 3 as shown in drawing 1 , It has the outer layer sheet 5 which laid on top of said non-liquid permeability rear-face sheet 3, and was combined with it. And the backside waist section 8, the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot in the both-sides section, and the venter waist section 10 are formed in a longitudinal direction in one one by one. Arrange said absorber 4 in the circumference section 9 of said length from the crotch to the cuff at least, and the elastic body 16 for backside waist and the elastic body 17 for venter waist which are expanded and contracted crosswise [ of said outer layer sheet 5 ] are arranged in the backside waist section 8 and the venter waist section 10 of said outer layer sheet 5. While forming the backside bond parts 19, 19, 19, and 19 in the both-sides section of the backside waist section 8 of the outer layer sheet 5, the venter bond parts 20 and 20 combined with both these backside bond parts 19, 19, 19, and 19 respectively free [ engaging and releasing ] are formed in the both-sides section of the venter waist section 10.

[0163] First, according to the production process shown in <u>drawing 9</u>, on the 1st [ of the long picture moved to a longitudinal direction ] non-liquid permeability rear-face sheet object 31, make it elongate, respectively, the 1st long elastic string-like object 32 and the 2nd elastic string-like object 33 are made to counter in the shape of symmetry mutually, and it is crooked crosswise by turns, arranges in the longitudinal direction of the 1st non-liquid permeability rear-face sheet object 31 of said long picture, and joins together with adhesives etc.

[0164] Next, according to the production process shown in drawing 10, on the 1st [ of said long

picture ] non-liquid permeability ar-face sheet object 31, on both sides said 1st elastic string-like object 32 and said 2nd elastic string-like object 33, the 2nd long non-liquid permeability rear-face sheet object 34 is piled up, it joins together with adhesives etc., and the long non-liquid permeability rear-face sheet component 36 is formed.

[0165] Next, it is located according to the production process shown in <u>drawing 11</u> at the portion which said 1st elastic string-like object 32 and said 2nd elastic string-like object 33 approached on the 2nd [ of this long picture ] non-liquid permeability rear-face sheet object 34, and the longitudinal direction of this absorber 4 is arranged according to the cross direction of the 2nd non-liquid permeability rear-face sheet object 34 of said long picture, and an absorber 4 is combined with adhesives etc.

[0166] Next, according to the production process shown in <u>drawing 12</u>, on the 2nd [ of said long picture ] non-liquid permeability rear-face sheet object 34, on both sides of said absorber, the long liquid permeability surface sheet object 35 is arranged, and it joins together with adhesives etc.

[0167] Next, the liquid permeability surface sheet object 35 of the long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects 31 and 34 and long absorbers 4 which fastened said 1st elastic string-like object 32 and the 2nd elastic string-like object 33 according to the production process shown in drawing 13 In the portion which the gap of the adjoining absorber 4, the 1st elastic string-like object 32 between four, and the 2nd elastic stringlike object 33 isolated most Crosswise [ of the long non-liquid permeability rear-face sheet component 36 and the long liquid permeability surface sheet object 35 ], it cuts from the bothsides section along with the both-ends side of the 1st elastic string-like object 32 and the 2nd elastic string-like object 33, and main part section of absorptivity goods 4a is formed in it. [0168] Main part section of absorptivity goods 4a manufactured at this production process The liquid permeability surface sheet 2 formed with the long liquid permeability surface sheet object 35, An absorber 4 is arranged between the non-liquid permeability rear-face sheets 3 formed with the long non-liquid permeability rear-face sheet component 36. The circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot, and the venter waist section 10 are formed in the backside waist section 8 and the both-sides section in one one by one at a longitudinal direction. The 1st elastic body 12 which said absorber 4 is arranged in the circumference section 9 of length from the crotch to the cuff, and is formed with the 1st elastic string-like object 32 Apply both ends to the circumference section 11 of a foot from the backside waist section 8, and while arranging and joining together along with the side edge section of the cross direction of the non-liquid permeability rear-face sheet 3, it is crooked in the direction which crosses the circumference section 9 of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in the non-liquid permeability rear-face sheet 3 of a circumference section of length from the crotch to the cuff 9 smell lever. The 2nd elastic body 13 formed with the 2nd elastic string-like object 33 Both ends are applied to the circumference section 11 of a foot from the venter waist section 10, and while arranging and joining together along with the side edge section of the cross direction of the non-liquid permeability rear-face sheet 3, it is crooked in the direction which crosses the circumference section 9 of said length from the crotch to the cuff, pars intermedia is arranged crosswise in the non-liquid permeability rear-face sheet 3 of a circumference section of length from the crotch to the cuff 9 smell lever, and it is combined.

[0169] Next, in the condition of having made the crosswise both-sides section on the outside sheet object 37 of the long picture moved to the longitudinal direction elongating the long elastic member 38 for backside waist, and the elastic member 39 for venter waist toward the longitudinal direction of the outside sheet object 37 of this long picture according to the production process shown in drawing 14, it arranges in two or more juxtaposition, respectively, and fixes.

[0170] Next, according to the production process shown in drawing 15, on the outside sheet object 37 of said long picture, it inserts, where said elastic member 38 for backside waist and the elastic member 39 for venter waist are expanded, and the outer layer sheet component 41 of the long picture which piled up the long inside sheet object 40, arranged, and was combined is formed.

[0171] On the other hand, said outer layer sheet component 41 according to the production

process shown in drawing 19 next, to crosswise 1 flank of a field It prepares in the outer layer

sheet component 41 with the see gap. the longitudinal direction of this ear layer sheet component 41 — approaching — juxtaposition — the backside bond part material 44, 44, 44, and 44 of a lot — the crosswise size of said main part section of absorptivity goods 4a, and abbreviation — The flank besides the cross direction of an another side side of said outer layer sheet component 41 is approached at the longitudinal direction of this outer layer sheet component 41. the venter bond part material 45 and 45 of the lot which can engage and release said backside bond part material 44, 44, 44, and 44 prepared in juxtaposition freely — the crosswise size of said main part section of absorptivity goods 4a, and abbreviation — it prepares in the outer layer sheet component 41 with the same gap.

[0172] According to the production process shown in drawing 20, next, on the outer layer sheet component 41 of said long picture Main part section of absorptivity goods 4a formed at the production process which turns the longitudinal direction of said main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and is shown in drawing 13 is arranged. The superposition section with the outer layer sheet component 41 of the portion which extended at least to the method of outside [ section / of the absorber 4 of the non-liquid permeability rear-face sheet 3 / crosswise / edges-on-both-sides ] of the circumference section 11 of a foot of this main part section of absorptivity goods 4a is removed. The non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a is combined with adhesives etc. on the outer layer sheet component 41. And after combining said non-liquid permeability rear-face sheet 3 with adhesives etc. on the outer layer sheet component 41, this outer layer sheet component 41 is cut from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and the circumference section 11 of a foot in diaper object 1C is formed.

[0173] Next, the production process shown in <u>drawing 21</u> cuts said outer layer sheet component 41 crosswise on the line which connects between the venter bond part material 45 and 45 of said lot between the backside bond part material 44, 44, 44, and 44 of said lot. Thus, formed diaper object 1C has the outer layer sheet 5, the backside bond part 19, and the venter bond part 20, and forms in a longitudinal direction the backside waist section 8, the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot in the both—sides section, and the venter waist section 10 in one one by one, and is arranging said absorber 4 in the circumference section 9 of length from the crotch to the cuff at least.

[0174] Next, an operation of the gestalt of this operation is explained.

[0175] Moving the long non-liquid permeability rear-face sheet component 36, the 1st elastic string-like object 32, the 2nd elastic string-like object 33, and the long liquid permeability surface sheet object 35 to a longitudinal direction, it piles up in order and main part section of absorptivity goods 4a can be manufactured. Main part section of absorptivity goods 4a which cuts crosswise and is formed the liquid permeability surface sheet object 35 of the long picture which fastened the long non-liquid permeability rear-face sheet component 36 and a long absorber 4 Since it can arrange on the outer layer sheet component 41 moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, increase in efficiency of the manufacturing process of diaper object 1C as absorptivity goods and easy-ization of manufacture can be attained.

[0176] Moreover, by making a longitudinal direction go and come back to the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 to the travelling direction of the long non—liquid permeability rear—face sheet component 36 Since the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non—liquid permeability rear—face sheet object 31 and can combine with it it is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non—liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non—liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0177] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like

object 32 and the 2nd elastic stage—like object 33 to the travelling direct. Of the long non-liquid permeability rear—face sheet component 36 Since the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non-liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non-liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non-liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0178] Moreover, the production process of the outer layer sheet component 41 which forms the backside bond part material 44, 44, 44, and 44 of a lot in crosswise 1 flank of a field, and, on the other hand, forms the venter bond part material 45 and 45 of a lot in it at the flank besides the cross direction of an another side side of said outer layer sheet component 41, Main part section of absorptivity goods 4a is arranged on the outer layer sheet component 41 of said long picture. Cut the production process to combine and said outer layer sheet component 41 crosswise, and it has the outer layer sheet 5, the backside bond part 19, and the venter bond part 20. And the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot, and the venter waist section 10 are formed in the backside waist section 8 and the both-sides section in one one by one at a longitudinal direction. According to the production process which forms diaper object 1C as an absorptivity goods object which arranged said absorber 4 in the circumference section 9 of length from the crotch to the cuff at least While the backside bond parts 19, 19, 19, and 19 are formed in the both-sides section of the backside waist section 8 of the outer layer sheet 5 Diaper object 1C which formed the venter bond parts 20 and 20 combined with both these backside bond parts 19, 19, and 19 respectively free [engaging and releasing ] in the both-sides section of the venter waist section 10 can be manufactured easily.

[0179] Next, the gestalt of other operations of the manufacture method of the disposable absorptivity goods of this invention is explained based on <u>drawing 9</u> thru/or <u>drawing 15</u>, <u>drawing 21</u>, drawing 26, and drawing 27.

[0180] The production process which cuts the outer layer sheet component 41 from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of the main part sections 4a and 4a of absorptivity goods, and forms the circumference section 11 of a foot in diaper object 1C in the gestalt of said operation Main part section of absorptivity goods 4a formed on the long outer layer sheet component 41 at the production process which turns the longitudinal direction of said main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and is shown in <u>drawing 13</u> is arranged. Although the non-liquid permeability rear—face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a was performed after the production process combined with adhesives etc. on the outer layer sheet component 41 On the other hand in the gestalt of this operation, it carries out to crosswise 1 flank of a field after the production process of the outer layer sheet component 41 which forms the backside bond part material 44, 44, 44, and 44 of a lot, and forms the venter bond part material 45 of a lot in the flank besides the cross direction of an another side side of said outer layer sheet component 41.

[0181] Therefore, after the production process which forms the outer layer sheet component 41 of the long picture which piled up the long inside sheet object 40, arranged, and was combined in this manufacture method on both sides of the elastic member 38 for backside waist, and the elastic member 39 for venter waist on the long outside sheet object 37 as shown in <u>drawing 15</u> As shown in <u>drawing 26</u>, on the other hand, the outer layer sheet component 41 to crosswise 1 flank of a field The backside bond part material 44, 44, 44, and 44 of a lot is formed in the outer layer sheet component 41. After forming the venter bond part material 45 and 45 of the lot which can engage and release the flank besides the cross direction of an another side side of said outer layer sheet component 41 freely at said backside bond part material 44, 44, 44, and 44 in the outer layer sheet component 41 This outer layer sheet component 41 is cut in an abbreviation ellipse form, and the circumference section 11 of a foot in diaper object 10 is formed.

[0182] Next, as shown in drawle 7, main part section of absorptivity get 3. 4a formed on the long outer layer sheet component 41 at the production process which turns the longitudinal direction of main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and is shown in drawing 13 is arranged. The production process which combines the non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a on the outer layer sheet component 41 is performed.

[0183] Next, the production process shown in <u>drawing 21</u> cuts said outer layer sheet component 41 crosswise on the line which connects between the venter bond part material 45 and 45 of said lot between the backside bond part material 44, 44, 44, and 44 of said lot.

[0184] In addition, the production process shown in <u>drawing 9</u> thru/or <u>drawing 14</u> is the same as the gestalt of said operation.

[0185] With the gestalt of this operation, moving the long non-liquid permeability rear-face sheet component 36, the 1st elastic string-like object 32, the 2nd elastic string-like object 33, and the long liquid permeability surface sheet object 35 to a longitudinal direction, it piles up in order and main part section of absorptivity goods 4a can be manufactured. Main part section of absorptivity goods 4a which cuts crosswise and is formed the liquid permeability surface sheet object 35 of the long picture which fastened the long non-liquid permeability rear-face sheet component 36 and a long absorber 4 Since it can arrange on the outer layer sheet component 41 moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, increase in efficiency of the manufacturing process of diaper object 1C as absorptivity goods and easy-ization of manufacture can be attained.

[0186] Moreover, by making a longitudinal direction go and come back to the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 to the travelling direction of the long non—liquid permeability rear—face sheet component 36 Since the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non—liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non—liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non—liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0187] Moreover, by making a longitudinal direction go and come back to the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 to the travelling direction of the long non—liquid permeability rear—face sheet component 36 Since the 1st elastic string—like object 32 and the 2nd elastic string—like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non—liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non—liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non—liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0188] Moreover, the backside bond part material 44, 44, 44, and 44 of a lot is formed in the outer layer sheet component 41 at crosswise 1 flank of the one direction of the outer layer sheet component 41. The production process which forms the venter bond part material 45 and 45 of a lot in the flank besides the cross direction of an another side side of said outer layer sheet component 41, Said main part section of absorptivity goods 4a is arranged on the outer layer sheet component 41 of said long picture. The production process which combines the non-liquid permeability rear—face sheet 3 of said main part section of absorptivity goods 4a, Cut said outer layer sheet component 41 crosswise, and it has the outer layer sheet 5, the backside bond part 19, and the venter bond part 20. And the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot, and the venter waist section 10 are formed in the backside waist section 8 and the both—sides section in one one by one at a longitudinal direction. According to the production process which forms diaper object 1C as an absorptivity goods object which arranged said absorber 4 in the circumference section 9 of length from the

crotch to the cuff at least While rming the backside bond parts 19, 19, and 19 in the both-sides section of the backside waist section 8 of the outer layer sheet 5 Diaper object 1C which formed the venter bond parts 20 and 20 combined with both these backside bond parts 19, 19, 19, and 19 respectively free [ engaging and releasing ] in the both-sides section of the venter waist section 10 can be manufactured easily.

[0189] Next, the gestalt of other operations of the manufacture method of the disposable absorptivity goods of this invention is explained based on <u>drawing 9</u> thru/or <u>drawing 15</u>, <u>drawing 19</u>, drawing 28, and <u>drawing 29</u>.

[0190] The production process which cuts between the backside bond part material 44, 44, 44, and 44 and the arrangement portions of the venter bond parts 45 and 45 for the outer layer sheet component 41 in an abbreviation ellipse form, and forms the circumference section 11 of a foot in diaper object 1C in the gestalt of said operation The backside bond part material 44, 44, 44, and 44 of a lot is formed in the outer layer sheet component 41 at crosswise 1 flank of the one direction of the outer layer sheet component 41. Although the production process which performs the venter bond part material 45 and 45 of the lot which can engage and release said backside bond part material 44, 44, and 44 prepared in the flank besides the cross direction of an another side side of said outer layer sheet component 41 freely after the production process prepared in the outer layer sheet component 41 was taken in the gestalt of this operation, the outer layer sheet component 41 is performed after the production process cut crosswise on the line which connects between the venter bond part material 45 and 45 of said lot between the backside bond part material 44, 44, 44, and 44 of said lot.

[0191] As shown in drawing 19, on the other hand, the outer layer sheet component 41 therefore, to crosswise 1 flank of a field The backside bond part material 44, 44, 44, and 44 of a lot is formed in the outer layer sheet component 41. As the venter bond part material 45 and 45 of the lot which can engage and release the flank besides the cross direction of an another side side of said outer layer sheet component 41 freely at said backside bond part material 44, 44, 44, and 44 is shown at drawing 27 after the production process prepared in the outer layer sheet component 41 Main part section of absorptivity goods 4a formed on the long outer layer sheet component 41 at the production process which turns the longitudinal direction of said main part section of absorptivity goods 4a crosswise [ of the outer layer sheet component 41 ], and is shown in drawing 13 is arranged. The production process which combines with adhesives etc. the non-liquid permeability rear-face sheet 3 of a portion with which said absorber 4 was arranged in the circumference section 9 of length from the crotch to the cuff of said main part section of absorptivity goods 4a on the outer layer sheet component 41 is performed.

[0192] Next, as shown in <u>drawing 28</u>, after cutting the outer layer sheet component 41 crosswise on the line which connects between the venter bond part material 45 and 45 of said lot between the backside bond part material 44, 44, 44, and 44 of said lot, as shown in <u>drawing 29</u> Cut the outer layer sheet 5 from the both-sides section location of the circumference section 9 of length from the crotch to the cuff of main part section of absorptivity goods 4a, and the circumference section 11 of a foot in diaper object 1C is formed. Have the outer layer sheet 5, the backside bond part 19, and the venter bond part 20, and the backside waist section 8, the circumference section 9 of length from the crotch to the cuff which has the circumference section 11 of a foot in the both-sides section, and the venter waist section 10 are formed in a longitudinal direction in one one by one. The production process which forms diaper object 1C as an absorptivity goods object which arranged said absorber 4 in the circumference section 9 of length from the crotch to the cuff at least is performed.

[0193] In addition, the production process shown in <u>drawing 9</u> thru/or <u>drawing 15</u> is the same as the gestalt of said operation.

[0194] With the gestalt of this operation, the long non-liquid permeability rear-face sheet component 36, the 1st elastic string-like object 32, the 2nd elastic string-like object 33, and the long liquid permeability surface sheet object 35 are piled up, and main part section of absorptivity goods 4a can be manufactured. Main part section of absorptivity goods 4a which cuts crosswise and is formed the liquid permeability surface sheet object 35 of the long picture which fastened the long non-liquid permeability rear-face sheet component 36 and a long absorber 4 Since it can arrange on the outer layer sheet component 41 moved to the longitudinal direction, without

changing the sense of a longitude all direction and the cross direction, increase in efficiency of the manufacturing process of diaper object 1C as absorptivity goods and easy-ization of manufacture can be attained.

[0195] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like object 32 and the 2nd elastic string-like object 33 to the travelling direction of the long non-liquid permeability rear—face sheet component 36 Since the 1st elastic string-like object 32 and the 2nd elastic string-like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non-liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non-liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non-liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0196] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like object 32 and the 2nd elastic string-like object 33 to the travelling direction of the long non-liquid permeability rear—face sheet component 36 Since the 1st elastic string-like object 32 and the 2nd elastic string-like object 33 are made to counter in the shape of symmetry mutually, respectively, and it is crooked crosswise by turns, and can arrange in the longitudinal direction of the 1st long non-liquid permeability rear—face sheet object 31 and can combine with it It is not necessary to arrange the 1st elastic body 12 and 2nd elastic body 13 in the long non-liquid permeability rear—face sheet component 36 from a right angle to the flow direction where the long non-liquid permeability rear—face sheet component 36 goes to a longitudinal direction, and diaper object 1C can be manufactured easily.

[0197] Moreover, while forming the backside bond parts 19, 19, 19, and 19 in the both-sides section of the backside waist section 8 of the outer layer sheet 5, diaper object 1C which formed the venter bond parts 20 and 20 combined with both these backside bond parts 19, 19, 19, and 19 respectively free [engaging and releasing] in the both-sides section of the venter waist section 10 can be manufactured easily.

[0198]

[Effect of the Invention] According to invention according to claim 1, since the non-liquid permeability rear-face sheet of disposable absorptivity goods has extended in the method of outside [ section / of an absorber / the longitudinal direction both ends and the crosswise edges-on-both-sides section ], it can prevent that the elimination liquid which is not absorbed by the absorber \*\*\*\* to an outer layer sheet side. Moreover, since the circumference section of a foot was formed in the both-sides section of the circumference section of length from the crotch to the cuff of an outer layer sheet, disposable absorptivity goods can be stuck in a covering arrival person's body, and it can equip with them.

[0199] Moreover, the non-liquid permeability rear-face sheet of disposable absorptivity goods It extends in the method of outside [ section / of an absorber / the longitudinal direction both ends and the crosswise edges-on-both-sides section ]. The 1st and 2nd elastic bodies If a both-ends side is applied to the circumference section of a foot from the backside waist section and the venter waist section, while arranging along with the edges-on-both-sides section of the cross direction of a non-liquid permeability rear-face sheet, it is crooked in the direction which crosses the circumference section of said length from the crotch to the cuff, and pars intermedia is arranged crosswise in the circumference section of length from the crotch to the cuff between this non-liquid permeability rear-face sheet and an outer layer sheet. In the circumference section of a foot of disposable absorptivity goods, the superposition section of the portion which extended to the method of outside [ section / of the absorber of a non-liquid permeability rear-face sheet and an outer layer sheet / crosswise / edges-on-both-sides ] by being formed in the non-fixing section A non-liquid permeability rear-face sheet can enlarge a crosswise size, without being influenced by the crosswise size of an outer layer sheet. Moreover, since the circumference section of a foot of this non-liquid permeability rear-face sheet stands up in a covering arrival person's direction of the body, forms solid gathers and sticks them to a covering arrival person's body, without being influenced by the stress of the circumference section of an outer layer sheet foot in case a covering arrival person's body is equipped with disposable absorptivity goods inner

[ large-sized ] -- business -- ' vering arrival person's body can be equ ed in the high condition of adhesion or fit nature, without solid gathers' sticking to a covering arrival person's body, \*\*\*\* of the elimination liquid to the exterior not happening, even if it uses a pad, and standing up of a non-liquid permeability outer layer sheet influencing an outer layer sheet. [0200] according to invention according to claim 2, the absorptivity goods object is carrying out the trousers configuration — these disposable absorptivity goods — inner — business — where a pad is used, it can detach and attach by the ability detaching and attaching like trousers simply. [0201] A covering arrival person's body can be equipped with this absorptivity goods object, and it can be made to break away again by enabling engaging and releasing of the backside waist section of an absorptivity goods object, the backside bond part arranged in the edges on both sides of the venter waist section, respectively, and a venter bond part according to invention according to claim 3. Again between a covering arrival person's body, and absorptivity goods objects -- inner business — since it can equip with a pad or can be made to secede from it — inner — business -- a pad is easily exchangeable.

[0202] According to invention according to claim 4, the 1st elastic body and 2nd elastic body will be continuously arranged along with the crosswise edges—on—both—sides section of a non—liquid permeability rear—face sheet, and, as for the non—liquid permeability rear—face sheet near the circumference section of a foot of an absorptivity goods object, solid gathers are formed toward the standing—up direction.

[0203] According to invention according to claim 5, the 3rd elastic body arranged along the inside edge of both \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*, respectively when a covering arrival person's body was equipped with an absorptivity goods object does a contraction operation so. The 2nd solid gathers are formed in the inside section of the solid gathers by which the inside edge of a non-liquid-permeable sheet is formed in the both-sides section of a non-liquid permeability rear-face sheet with the 3rd elastic body, the elimination \*\*\*\*\*\* prevention effect is achieved, and the \*\*\*\* prevention function of the elimination liquid of an absorptivity goods object improves.

[0204] According to invention according to claim 6, by acquiring crosswise elasticity in the waist partial abbreviation whole region of an outer layer sheet, the adhesion and fit nature of an absorptivity goods object and a covering arrival person's body improve, and the \*\*\*\* prevention function of the elimination liquid of an absorptivity goods object improves with the elastic body for backside waist and the elastic body for venter waist which were arranged between this outside sheet piece and an inside sheet piece.

[0205] When a covering arrival person's body is equipped with an absorptivity goods object according to invention according to claim 7 The 4th elastic body of an outer layer sheet arranged along with the circumference section of a both-sides foot at least contracts. The outer layer sheet 4th near [ this ] the elastic body is concluded in the both-sides section of the circumference section of a foot at the circumference of a covering arrival person's foot, forms the 3rd solid gathers, and does the elimination \*\*\*\*\*\* prevention effect so. When it equips with an absorptivity goods object as an outer, while the elimination \*\*\*\*\*\* prevention effect of this absorptivity goods object improves, the adhesion of this absorptivity goods object and a covering arrival person's body improves.

[0206] According to invention according to claim 8, a long non-liquid permeability rear-face sheet component, the 1st elastic string-like object, Moving the 2nd elastic string-like object and a long liquid permeability surface sheet object to a longitudinal direction, it piles up in order and the main part section of absorptivity goods can be manufactured. The main part section of absorptivity goods which cuts crosswise the liquid permeability surface sheet object of the long picture which fastened a long non-liquid permeability rear-face sheet component and a long absorber, and is formed Since it can arrange on the outer layer sheet component moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, increase in efficiency of the manufacturing process of disposable absorptivity goods and easy-ization of manufacture can be attained.

[0207] Moreover, by making a longitudinal direction go and come back to the 1st elastic string-like object and the 2nd elastic string-like object to the travelling direction of a long non-liquid permeability rear-face sheet component Since the 1st elastic string-like object and the 2nd elastic string-like object are made to counter in the shape of symmetry mutually, respectively, and

it is crooked by turns in a long. That direction, and can arrange in the local udinal direction of the 1st long non-liquid permeability rear-face sheet object and can combine with it It is not necessary to arrange the 1st elastic body and 2nd elastic body in a long non-liquid permeability rear-face sheet component from a right angle to the flow direction which goes to the longitudinal direction of a long non-liquid permeability rear-face sheet component, and disposable absorptivity goods can be manufactured easily.

[0208] Moreover, after folding two outer layer sheet components, carrying out them along with a longitudinal direction from a crosswise center section and combining between the main part sections of absorptivity goods crosswise, the disposable absorptivity goods formed in the trousers configuration can be easily manufactured by cutting crosswise [ of an outer layer sheet component ].

[0209] According to invention according to claim 9, the disposable absorptivity goods formed in the trousers configuration can be manufactured easily.

[0210] According to invention according to claim 10, a long non-liquid permeability rear-face sheet component, Moving the 1st elastic string-like object, the 2nd elastic string-like object, and a long liquid permeability surface sheet object to a longitudinal direction, it piles up in order and the main part section of absorptivity goods can be manufactured. The main part section of absorptivity goods which cuts crosswise the liquid permeability surface sheet object of the long picture which fastened a long non-liquid permeability rear-face sheet component and a long absorber, and is formed Since it can arrange on the outer layer sheet component moved to the longitudinal direction, without changing the sense of a longitudinal direction and the cross direction, increase in efficiency of the manufacturing process of disposable absorptivity goods and easy-ization of manufacture can be attained.

[0211] Moreover, by making a longitudinal direction go and come back to the 1st elastic string—like object and the 2nd elastic string—like object to the travelling direction of a long non—liquid permeability rear—face sheet component Since the 1st elastic string—like object and the 2nd elastic string—like object are made to counter in the shape of symmetry mutually, respectively, and it is crooked by turns in a longitudinal direction, and can arrange in the longitudinal direction of the 1st long non—liquid permeability rear—face sheet object and can combine with it It is not necessary to arrange the 1st elastic body and 2nd elastic body in a long non—liquid permeability rear—face sheet component from a right angle to the flow direction which goes to the longitudinal direction of a long non—liquid permeability rear—face sheet component, and disposable absorptivity goods can be manufactured easily.

[0212] Furthermore, the disposable absorptivity goods which have the venter bond part which has a backside bond part in the both-sides section of the backside waist section of an outer layer sheet, and is combined with it by the both-sides section of the venter waist section respectively free [ engaging and releasing ] at both this backside bond part can be manufactured easily. [0213] According to invention according to claim 11, the disposable absorptivity goods of an expansion condition can be manufactured easily.

[Translation done.]

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## **DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] It is the plan which cut and lacked a part of condition that the disposable absorptivity goods in which the gestalt of 1 operation of this invention is shown developed.

[Drawing 2] It is the vertical section front view of the A-A line part in drawing 1 of disposable absorptivity goods same as the above.

[Drawing 3] It is an explanation plan in the condition that the disposable absorptivity goods in which the gestalt of other operations of this invention is shown developed.

[Drawing 4] It is an explanation plan in the condition that the disposable absorptivity goods in which the gestalt of other operations of this invention is shown developed.

[Drawing 5] It is an explanation plan in the condition that the disposable absorptivity goods in which the gestalt of other operations of this invention is shown developed.

[Drawing 6] It is the perspective diagram of the disposable absorptivity goods of a trousers configuration same as the above.

[Drawing 7] It is the vertical section front view of the disposable absorptivity goods in which the gestalt of other operations of this invention is shown.

[Drawing 8] It is the vertical section front view of the disposable absorptivity goods in which the gestalt of other operations of this invention is shown.

[Drawing 9] It is the explanation plan of the production process which arranges the 1st elastic string-like object and the 2nd elastic string-like object, and is combined on the 1st [ of a long picture ] non-liquid permeability rear-face sheet object in the gestalt of operation of the disposable absorptivity goods of this invention.

[Drawing 10] It is the explanation plan of the production process which arranges the 2nd long non-liquid permeability rear—face sheet object in the 1st non-liquid permeability rear—face sheet object of a long picture same as the above, combines with it on both sides of the 1st elastic string—like object and the 2nd elastic string—like object, and forms a long non-liquid permeability rear—face sheet component.

[Drawing 11] It is the explanation plan of the production process which arranges an absorber and is combined on the 2nd non-liquid permeability rear-face sheet object of a long picture same as the above.

[Drawing 12] It is the explanation plan of the production process which arranges a long liquid permeability surface sheet object, and is combined on both sides of an absorber on the 2nd non-liquid permeability rear—face sheet object of a long picture same as the above.

[Drawing 13] the same as the above — it is the explanation plan of the production process which cuts the liquid permeability surface sheet object of the long picture which fastened the 1st and 2nd long non-liquid permeability rear-face sheet objects and long absorbers which fastened the 1st elastic string-like object and the 2nd elastic string-like object crosswise [ of a long non-liquid permeability rear-face sheet component and a long liquid permeability surface sheet object ], and forms the main part section of absorptivity goods.

[Drawing 14] It is the explanation plan of the production process which arranges the elastic member for backside waist of the long picture on the outside sheet object of a long picture same as the above, and the elastic member for venter waist, and fixes.

[Drawing 15] It is the explanation plan of the production process which forms the outer layer sheet component of the long picture which piled up the long inside sheet object, arranged and was

combined on both sides of the stic member for backside waist, and the astic member for venter waist on the outside sheet object of a long picture same as the above.

[Drawing 16] It is the explanation plan of the production process which arranges the main part section of absorptivity goods, and is combined on the outer layer sheet component of a long picture same as the above.

[Drawing 17] It is the explanation plan of the production process which folds and carries out two outer layer sheet components same as the above.

[Drawing 18] It is the explanation plan of the production process which cuts an outer layer sheet component same as the above, and forms a diaper object.

[Drawing 19] It is the explanation plan of the production process which prepares bond part material on the outer layer sheet component of a long picture same as the above.

[Drawing 20] It is the explanation plan of the production process which arranges the main part section of absorptivity goods, and is combined on the outer layer sheet component of a long picture same as the above.

[Drawing 21] It is the explanation plan of the production process which cuts an outer layer sheet component same as the above crosswise, and forms a diaper object.

[Drawing 22] It is the explanation plan of the production process which arranges the main part section of absorptivity goods, and is combined on the outer layer sheet component of a long picture same as the above.

[Drawing 23] It is the explanation plan of the production process which folds and carries out two outer layer sheet components same as the above.

[Drawing 24] It is the explanation plan of the production process which combines the outer layer sheet component which carried out the two same-as-the-above chip box.

[Drawing 25] It is the explanation plan of the production process which cuts an outer layer sheet component same as the above, and forms a diaper object.

[Drawing 26] It is the explanation plan of the production process which prepares bond part material on the outer layer sheet component of a long picture same as the above.

[Drawing 27] It is the explanation plan of the production process which combines the main part section of absorptivity goods on the outer layer sheet component of a long picture same as the above.

[Drawing 28] It is the explanation plan of the production process which combines the main part section of absorptivity goods on an outer layer sheet component on the outer layer sheet component of a long picture same as the above.

[Drawing 29] It is the explanation plan of the production process which cuts an outer layer sheet component same as the above crosswise, and forms a diaper object.

[Description of Notations]

- 1 Diaper Object as an Absorptivity Goods Object
- 1A The diaper object as an absorptivity goods object
- 1B The diaper object as an absorptivity goods object
- 1C The diaper object as an absorptivity goods object
- 2 Liquid Permeability Surface Sheet
- 3 Non-Liquid Permeability Rear-Face Sheet
- 4 Absorber
- 4a Main part section of absorptivity goods
- 5 Outer Laver Sheet
- 8 Backside Waist Section
- 9 Circumference Section of Length from the Crotch to the Cuff
- 10 Venter Waist Section
- 11 11a Circumference section of a foot
- 12 1st Elastic Body
- 13 2nd Elastic Body
- 14 Outside Sheet Piece
- 15 Inside Sheet Piece
- 16 Elastic Body for Backside Waist
- 17 Elastic Body for Venter Waist

- 18 4th Elastic Body
- 19 Backside Bond Part
- 20 Venter Bond Part
- 21 21a Non-liquid-permeable sheet
- 22 3rd Elastic Body
- 24 On the Other Hand, it is Side Edge Section.
- 25 Other Side Edge
- 26 On the Other Hand, it is Side Edge Section.
- 27 Other Side Edge
- 28 Bond Part
- 29 Waist Side Opening
- 30 Circumference Side Opening of Foot
- 31 1st Long Non-Liquid Permeability Rear-Face Sheet Object
- 32 1st Elastic String-like Object
- 33 2nd Elastic String-like Object
- 34 2nd Long Non-Liquid Permeability Rear-Face Sheet Object
- 35 Long Liquid Permeability Surface Sheet Object
- 36 Long Non-Liquid Permeability Rear-Face Sheet Component
- 37 Long Outside Sheet Object
- 38 Elastic Member for Backside Waist
- 39 Elastic Member for Venter Waist
- 40 Long Inside Sheet Object
- 41 Outer Layer Sheet Component
- 42 Bond Part
- 44 Backside Bond Part Material
- 45 Venter Bond Part Material

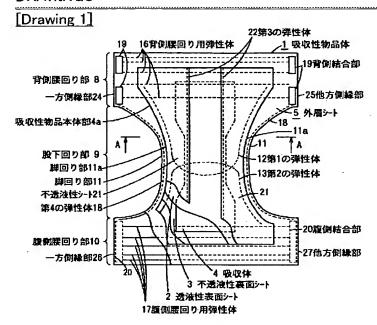
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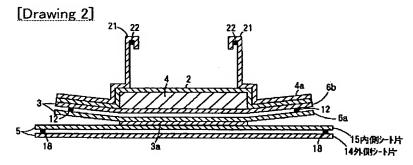
## \* NOTICES \*

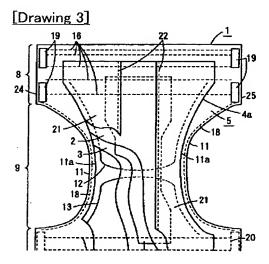
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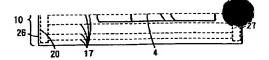
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- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

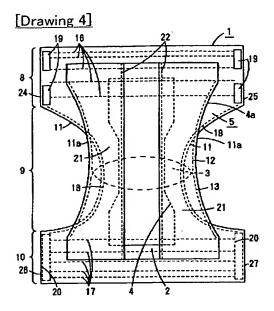
## **DRAWINGS**

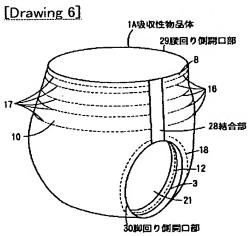


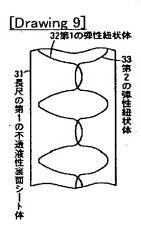




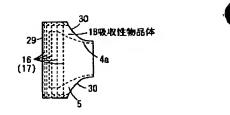


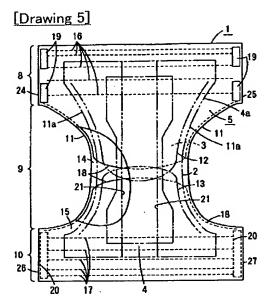


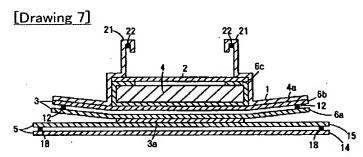


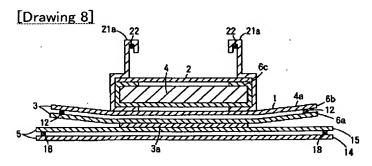


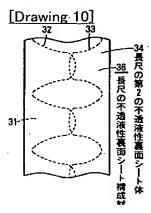
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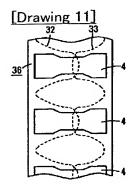


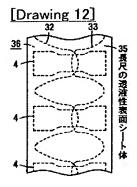


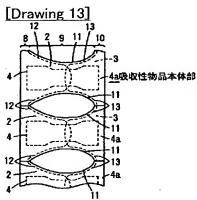


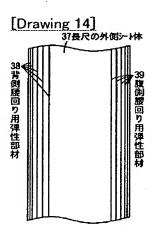




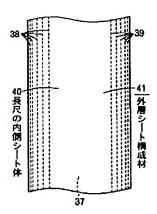


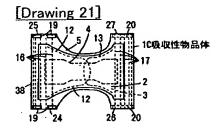


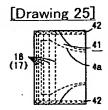


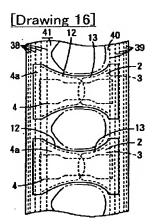


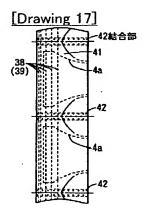
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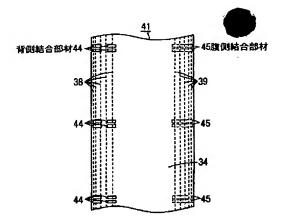


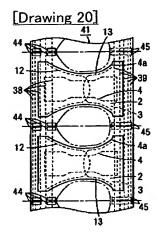


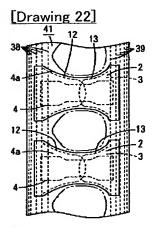


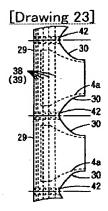


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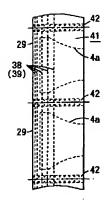


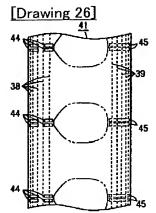


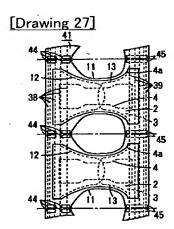


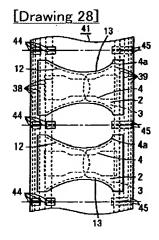


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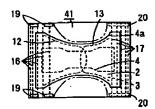








[Drawing 29]



[Translation done.]